

The Horse.

ABOUT PERCHERONS.

Forrest Hill, Mich., Feb. 8th, 1887.
To the Editor of the Michigan Farmer.

I would like to have the following questions answered through the FARMER. I think the answers will be of interest to others besides myself:

1st. What constitutes a thoroughbred Percheron horse?

2nd. Will a certain number of straight crosses of a thoroughbred sire, on our common mares, produce the standard bred or thoroughbred Percheron-Norman, eligible to the stud book?

I would also like to have the above questions answered, when applied to the Shire horses.

3rd. Give an outline of the history of the French horse. Were they a distinct breed, and do they exist to-day as such?

4th. Where can any books be obtained giving reliable information regarding any or all of the above breeds?

H. B. ANGELL.

To your first question, what constitutes a thoroughbred Percheron horse, we answer that a certificate of the Societe Hipique Percheronne of France, as to the eligibility of any horse to registry under their rules is necessary before the horse can be recorded in this country. This society was only organized in 1883, and publishes a stud-book for this breed. Previous to that time the question of the breeding of any horse could only be substantiated by the statement of the party who bred him.

To your second question we answer that the rules for recording stock in the American Percheron Stud Book prescribe that all animals imported from France prior to the date when the French Stud book was commenced shall be eligible to registry. All imported since that date must be recorded in France to secure registry here; but an animal with five straight crosses of recorded stock is eligible. Those bred in the United States from recorded sires and dams are also eligible to record.

Regarding the origin of the breed it is generally agreed that it resulted from the use of Arabian horses to the ordinary mares of the country. It is assumed by some that an infusion of Arabian blood was made at the time of the defeat of the Saracens by Charles Martel, when a large number of eastern bred horses were undoubtedly left in France. But the Percherons owe much of their superiority to the use of Arabian blood about 1830; the horse Gallipoli, a gray, being cited as the foundation of the improvement. It is asserted by those who have been engaged in tracing up the records of the breed that the most famous sires known to breeders of Percherons trace directly to this horse. If our correspondent understands the history of the American trotting horse he will have a very good idea of the formation of the Percheron, Gallipoli standing in the same relation to the Percheron as Messenger to the trotter. The French government has always exercised a supervision over the breeding of horses, and prescribed the stallions to which alone owners of mares should breed, and this has had a large influence in securing a breed of horses without hereditary defects, and of stamina and constitution.

As to the books which treat of the history of the breed, as much can be got in the first volume of the American Percheron Stud Book as anywhere. You can get this upon application to Mr. S. D. Thompson, of the American Percheron Association, Wayne, Illinois.

The Horse Remembers Kindness.

A very remarkable incident in the history of the Bush Messenger illustrates that though abuse may seem to it, it does not wholly destroy the better nature, and that one touch of kindness calls into life all the old virtues. Years after he was sold Mr. Bush determined to see his old favorite, whom he found kept in a pasture surrounded by a fence ten feet high, through a hole in which the food and water were passed to Messenger as if he were "a dangerous convict." Mr. Bush was warned not to enter the enclosure for his very life, but he went in and unobserved, concealed himself behind a tree and whistled. With a neigh the grand old fellow came bounding across the field in search of the well remembered whistle. The horse reared around the pasture, and when at the height of his run Mr. Bush exposed himself and made directly for him, while the outsiders trembled in terror. But instead of seeking to kill, the horse came up gently and laid his head on his old master's shoulder to receive the customary caress. When Mr. Bush's time for departure had come, he had proceeded but a few yards from the enclosure when there was a crash and out Messenger came, bounding through the strong bars. He followed his former owner to the stable gently, where he was secured by strong ropes and for a long, long distance upon the road home Mr. Bush could hear the noble animal neighing, lashing the stall and struggling to be free and follow.

It is a good thing for a man to be master of his horse, but to be master of his affections is an absolutely noble thing.—*Wallace's Monthly.*

A Stallion Fight.

A correspondent of the Cincinnati Enquirer tells of a terrible fight which recently occurred between two trotting bred stallions on the Haines stock farm, near Pemberton, N. J., which is owned by Richard B. Haines, of Philadelphia. The two stallions, Don Ogden and Aberdeen Knox, the former by Kentucky Prince and the latter by Gen. Knox, were kept in separate paddocks, although they had never manifested any ill-feeling toward each other. In pleasant weather Mr. Haines had been in the habit of giving them the run of the paddocks, and yesterday both of them were out. Shortly after Mr. Haines left home Don Ogden managed to get his gate open, and then began a furious fight, the stallions biting and kicking each other as they trumpeted their war cry. The next minute the strong fence was torn down and two infuriated beasts were at each other, biting and kicking at a terrible rate, at the same time giving vent to the most unearthly noises. The farm hands were quickly summoned, and as they approached they found one horse lying on the ground and the other was just getting up. An examination discovered

the fact that Dan Ogden had been roughly handled. There were ugly marks and cuts on his head and neck, and a piece of flesh eight inches long had been torn from his breast, but it is thought his injuries are not serious. Knox was cut up but not so badly.

Horse Gossip.

OLIVER K. is said to have gained 100 pounds in weight since he arrived in California.

It is reported from California that Harry Wilkes has had one of his hind legs blistered.

Two hundred and fifty horses were sold at the Bradford sale, and brought \$80,190, an average of \$324 per head.

SAM ROWE, of Hudson, Wis., has purchased the pacer Mike Wilkes. He will be under the management of Abe Bohrbach the coming season.

MR. R. B. CONKLIN, the veteran breeder of trotting horses, is dangerously sick at Greenport, Long Island, his home. He is the owner of King Wilkes.

A. C. FISK, of Coldwater, Branch County, has sold to J. H. Lewis, of Brockport, Conn., the horse Dictator by Dictator Boy, dam Stockbridge Belle by Stockbridge Chief.

THOROUGHBRED stallions command very large prices in England. The Bard, the best horse which appeared on the turf there the past season, was sold recently for about \$50,000.

MR. EDWARD DICKSON, of Lowell, Kent County, has purchased the thoroughbred horse Trafalgar, foaled 1883, by King Alfonso, dam Acrotile by Lexington; second dam, Florine by Imp. Glencoe.

JOHNSTON BROS., of Greenville, Monticou County, has purchased from Gen. W. T. Withers, of Fairview Stock Farm, Lexington, Ky., the trotting bred filly Spring Maiden, by Happy Medium, dam Maggie Keene by Mambrino Hatcher. Price, \$15,000.

MR. G. N. HATCH, of Jackson, this State, has purchased from a Kentucky breeder the trotting stallion Detector, by Dictator; dam, Big Mary by D. Monroe; 2d dam, Madam Peville by Alexander's Bay Chief; 3d dam by Tornado; 4th dam by a Whip horse.

At a recent meeting of the Board of Directors of the Buffalo Driving Park Association Mr. C. J. Hamlin was elected president, and Mr. D. W. Burt Secretary. The association is trying to raise \$250,000 for the purpose of holding a fair similar to the great St. Louis fair.

MR. E. J. BALDWIN, of California, popularly known as "Lucky Baldwin," has published the following challenge: "I will run a match with any horse after the Lathrop meeting for \$10,000 or more, the distance to be one and a half miles, play or pay, half forfeit. If this is not accepted it ends the matter." The horse he proposes to match is Volante.

Word comes from England that Mr. E. P. Wilson's American bred horse Sachem by War Dance, dam Sly Boots, won the Leamington Handicap Steeplechase at the Warwick and Leamington meeting on the 16th ult. He was ridden by his owner, at 153 pounds, and started at 4 to 1 against. The distance was about two miles. Sachem won by a length from the French-bred horse Extraneous, carrying 158 pounds, with three others in the race. Sachem is one of the horses sent over by Mr. P. Lorillard, and sold there.

Cataract Cured.

A clergyman, after years of suffering from that loathsome disease, Cataract, and vainly trying every known remedy, at last found a prescription which completely cured and saved him from death. Any sufferer from this dreadful disease sending a self addressed stamped envelope to Dr. Lawrence, 212 East 9th St., New York, will receive the cure free of charge. \$100-00

The Farm.

Raising Early Lambs.

MR. J. S. WOODWARD, of Niagara, N. Y., read a paper on the above subject before the institute held at Ithaca, N. Y., in February, in which he named the requisites to success as follows:

First—The shepherd, upon whom much depends. He must be adapted to his business, prompt, always on hand. A sheep's stomach is as delicate as a clock. Go into the pen five minutes before feeding time, and they are all lying down chewing the cud, and there they remain until their usual feeding time, when they will all be up and ready for their feed to the minute. The shepherd must feed exactly at the same time every day. He must be a man of good judgment, knowing when he is feeding all the sheep will bear and not over-feeding, judging by the appearance of the ewes and their faces when he is feeding just right. He must be quiet and gentle, and slow and easy even, rather than quick and rushing, as the quick motion or loud noise attracts the attention of the sheep at once, and are to be avoided. He must also be naturally kind, so that the sheep will care no more for him than for each other.

Second—Barns must be fitted for the business. As it would be the height of folly to leave a barn and an expensive machine exposed to the storms of autumn and winter, so it is equally foolish to expect profit from a flock of sheep so exposed. No machine is more delicate than a sheep, and they need protection from cold and frost. Ewes should be so warm that no frost ever enters them. The water pipes ought never to be in danger of freezing, the proper temperature being from 45 deg. to 55 deg. for sheep shorn in December or early January. Yet the barns must be well ventilated. Foul air produces disease, which, in turn takes off the profit. The worst method of ventilation is the most common one, by the windows. A better way is by means of trunks running to roof and chimneys with cows on them as in many hot-houses. Drafts of air must be avoided as they produce colds. Barns must be sufficiently roomy. In overcrowding pens sheep run over each other, injuring the weaker ones and crowding them away from their feed. The animals should be sorted according to size as far as practicable, due regard being had to the advantage of having those ewes together that lamb at about the same time. Twenty ewes are enough in each pen.

Third—Food. The simultaneous development of the bone, wool, fat and muscle in

the system of the sheep requires a wide diversity of elements in the food. It would be impossible, for instance, to get ewes to thrive well on a diet of corn alone; they would grow too fat, and would amount to nothing. Variety is absolutely essential. Among the best of the more common feeding stuffs are bran, corn, oil meal (new process preferred) and clover hay. Some succulent fodder is absolutely necessary, and that in abundance. Mangels and rutabagas supply this want. No experiments with ensilage are known, but no doubt it would be good, but perhaps no more profitable than roots.

Fourth—Water supply. Sheep require a constant supply of water. Sometimes a sheep will eat a few mouthfuls, then go to the trough and drink perhaps a couple of swallows, then eat a little more, then drink again, and so on. It is a mistake to suppose that they do not need it. It is essential, too, that it should be pure and fresh. The pens must be kept clean and tidy. A sheep will not eat out of a trough where it has been fouled by its own feet or in any manner. Grain put into a trough where any droppings are, or have been, is entirely wasted. The water troughs also must be kept pure and the sheep will actually starve themselves for water, this fact accounting in great measure for the prevalent theory that sheep need no water. Mr. Woodward's own method is to clean out the pens three or four times during the season, and draw the manure directly to the field.

In selecting the ewes the larger coarse wools must not be chosen, as they will not breed early. Michigan ewes, perhaps three-quarter blood Merinos, are perhaps as good as any, crossed with a ram of either of the large coarse wools, as Leicester, Cotswold, Hampshire, Shropshire or Southdown, perhaps preferring the Hampshire-down. If it were possible it would be most profitable to have the lambs come in October or November, but this is scarcely practicable, as few ewes can be brought in condition so early. About New Year is the best we can do in this section.

Some say that twice a day is enough to feed sheep; we say they should eat all the time, especially the lambs; and they will do it if you give variety enough, and the food is fresh and clean. It is a hot-house business, and the lambs must be pushed to their utmost capacity. The earlier to market the better the price.

Points of the Dairy Cow.

A Canadian farmer read a paper before the Ontario Creameries Association, in which he gave the points of a dairy cow as follows: "Plenty of brain room; large, bright eyes, prominent and mild; thin nose; broad muzzle, with large, thin, dilating nostrils, showing her to be a good feeder and consumer of oxygen; long, lean face, like that of a race horse; deep and broad through the body behind the shoulder and round, broad and full brisket, showing large size of lungs, and comfort while lying down, broad hips and straight back, giving a characteristic wedge shape to the body and showing large digestive qualities; flat hind legs; in-sloping hams, in-bolowing, giving plenty of room for large udder attachment with long line of absorption carried well forward, giving plenty of storage room; a thin, elastic skin; a mild temperament; neck tapering fine and not fleshy; strong jointure of spine to head and plenty of nervous activity. He advocated feeding bran in summer to supplement grass, and held that water should be warmed for cattle to drink. He strongly impressed the necessity of treating cows kindly.

Agricultural Items.

The editor of the N. E. Farmer thinks about half the animals recorded in the hard books ought to have been consumed as venison.

The Rural New Yorker rates poultry manure worth \$4.50 per barrel to those who know how to use it. Cabbage grows well on the soil of an old poultry yard.

It is said no owner of trotting stock in the world can compete with Robert Bonner in the art of shoeing and properly balancing a trotter. Maud S. is claimed to have improved wonderfully under his treatment.

MR. E. J. BROWNELL, a noted potato grower, who has originated several varieties, favors the level culture of his favorite tuber. He has tried both level and hill culture, with results largely in favor of the former.

THERE are 95 insects which affect corn; some attack the sprouting kernel, some the root, others the stalk, leaf, tassel or young silk, others the ear, either in the field or in crib, while others work in the meal.

THE South Australian wheat crop shows a surplus of 60,000,000 bushels, and this is now coming forward and capturing the indifference of English buyers to the American supply. The competition in wheat growing is sharper than ever before.

AN Ohio farmer thinks that if the demand for flour was as good as it is for iron and mill feed, millers could afford to pay a good price for wheat. Farmers in his vicinity buy large quantities of such supplies, besides feeding large quantities of ground corn and oats.

S. E. TOWN, in the *Hudsonian*, asserts that hen lice will not leave the hen and take up their abode on calves, cattle, horses, etc.; but that though these animals may be and undoubtedly are often troubled with lice, the parasites are those peculiar to themselves and not migratory mites from fowls.

A NEW YORK farmer feeds his swine largely on refuse beans, which he cooks and feeds with cotton-seed meal, roots and wheat bran. He feeds on this through winter, puts on a little more flesh in early spring and markets them when every body else has sold out and there is a good demand for fresh pork.

PROF. ROBERTS says that whenever we sell \$200 worth of wheat we sell \$57 worth of plant food. Butter, \$200 worth at 25 cents per pound, takes but half a dollar's worth of plant food. When we sell a horse for \$200, we have parted with but \$7 worth. The less is obvious, less wheat and more stock.

It is claimed for the sheep that its flesh commands a higher price in the markets of the world than that of any other animal. The statistics of the London markets show that for years mutton has sold 15 per cent higher than beef. Year by year the highest price is paid in the New York market for mutton; it is sometimes more than double the price of the best beef.

"The Rural New Yorker" says, very truly: "Many a farmer's meeting has been talked to death. People like short, sharp and lively papers. Take one of these long, wordy essays and cut out all the introduction and start right in about the facts. Then cut out all the guesses and the things that may be so because the speaker thinks so, and leave only what he knows to be true. There won't be much left, in some cases, but what there is left will be worth more than the whole before it was cut."

A SERIES of experiments instituted by Prof. Roberts, with a view to ascertaining the proper depth to plant wheat, proves conclusively that shallow planting gives best results. Wheat was planted at various depths, from 1/4 to 3/4 inches, up to 6 and 8 1/2 inches. The seeds from the planting 1/4 to 3/4 inches deep produced by far the hardest and most vigorous plants. In light, dry, porous soils, however, more covering is needed than in heavy moist lands. A depth of not less than three-fourths nor more than an inch and a half are probably the extremes for wheat to secure the best results.

THE Rural New Yorker says: "The new catalogues of the season offer wide Awake, Welcome, Probestor, White Russian, White Australian, American Triumph, White Belgian, American Banner, Clydesdale, Black Tartarian, Badger Queen, Race Horse and Yankee Prolific Cows. Bearing in mind that Welcome, White Australian, White Belgian, Clydesdale, Badger Queen and Race Horse are all White Australian, and that White Russian and Yankee Prolific are the same, it would be well to compare the prices at which they are offered in the various catalogues and, assured of the quality as may be, order accordingly. We find considerable difference as to price."

GLENN'S HONEY is the best Cough Cure, 25, 50c. GLENN'S SULPHUR SOAP heals and beautifies, 50c. GLENN'S CORN REMOVER kills Corns & Bunions, 50c. HILL'S HAIR & WHISKER DYE—Black & Brown, 50c. PIKE'S TOOTHACHE DROPS cure in 1 Minute, 50c. DEAN'S RHEUMATIC PILLS are a sure cure, 50c.

The Poultry Yard.

Parasites in Fowls.

S. E. TOWN, in the *Hudsonian*, says: In New Jersey, many henneries are infested with untold numbers of mites, which crawl on the fowls at night, gorge themselves with blood, and then return to cracks, crevices and holes in the perches, and on the sides of the building. This species of vermin is a terrible scourge, as the suffering fowls, during the silent midnight watches, are powerless and at the mercy of a relentless foe. They cannot flee from this enemy, as hordes of the nocturnal marauders attack the innocent fowls at night, when they must stick to their perches. Look around in your henneries, in warm weather, in holes, and recesses, and on the sides of the building, and these mites may be seen in clusters, many times, as large as the first joint of a man's thumb.

A friend, who had recently built a costly henneries, invited me to look at a henneries that "was absolutely vermin proof," as he said. He showed me a henneries, I said: "I judge that your fowls are grievously annoyed by vermin." He laughed me in the face, at such a suggestion. As soon as we entered his henneries and I had cast my eyes around, I exclaimed:

"Good heavens! who ever beheld such a sight!"

He thought I was expressing profound admiration for this beautiful henneries.

"The boys" said he, "ought to be switched for throwing such chunks of mud up against that wall."

"Not much is that mud!" said I. I requested him to get a large milk pan and brush-broom and collect that mud, which he brought, to his astonishment, consisted of large clusters of mites, as full as they could be of blood. He called the women out to see the shocking sight, when there was some tall screaming and gathering up of skirts. His hens were half dead. But he did not know it. The biddies yielded only a few eggs, as they were tormented the live-long night, so that they could not rest.

Well, the great practical question was: what can be done to exterminate the pests? The coachman was directed to deluge the interior of the building with water. So he sent a stream with great force into every crack and crevice, and washed out the vermin, which were carried along down with the droppings, and shovelled up and removed to the garden. Then, they piled on kerosene oil, every week. My friend soon could boast of a henneries destitute of vermin.

Setting Hens.

To get a successful hen it is necessary to have the hen comfortable and if this is done no hen in a hundred will forsake her eggs before they hatch, even if she is made to stay six or seven weeks. Early in the season the nests should contain more material than during the warm months. Nothing is better than straw, and let the hen shape it to her own ideas of the way it should be. This she will do in two or three days by giving her a few eggs, the nest shaping and packing down to shape her size. See to it that the hen is free of lice, otherwise they will multiply day by day, make the hen so restless she is liable to break the eggs and this cause, more than all others, drives the hen from the nest. Another thing is to leave her alone. Her instinct is better than your judgment. Usually she will want to feed about every three days and should have nothing but corn and water. A variety of food is very liable to cause a derangement of the bowels and the corn is longer in digestion and keep her in better flesh. When she leaves the nest it is best not to let her wander too far away and above all things don't run or frighten her. During this season and up till the hot days of June and July there is no need of sprinkling the eggs. Contain your own curiosity and the chances are that the hen will do her work well and bring off a good brood. This subject will conceive considerable attention during the hatching season.—*Home Journal.*

Seasonable Hints.

At Fresno, Cal., large numbers of turkeys are raised annually, and some farmers raise large flocks which they sent out on ranches as insect exterminators.

No one can keep fowls profitably covered with vermin, or surrounded by filth. The first consideration is health, the next, cleanliness, warmth, ventilation, variety of food.

PEOPLE who purchase fowls in market seem to prefer those that have a rich yellow skin with yellow legs, and therefore poultry growers should endeavor to accommodate them; but in reality the dark legged fowls are the best for the table, being finer grained, having a delicate flesh and thin skin.

A woman has suggested the following plan for keeping the drinking water warm in the poultry house on cold days: Take a tin or iron vessel or even a stone jar will do, in the bottom of which place some hot ashes. Place inside this a smaller vessel, around which put more hot ashes. Now fill the inside can with warm water and it will remain so for several hours. This scheme is undoubtedly a good one and deserves a trial.

THE Farmer's Home Journal gives the following good advice to dealers in poultry supplies: "Eggs that are broken in shipment should be replaced. People do not pay for cracked eggs (those can be had near home at a lower price) and are entitled to all they pay for. If the breakage is due to the carelessness of the express company the purchaser should not be made a party to the trouble but the shipper and the express company must settle the difference. No misrepresentation should be made by either party and the breeder who attempts to make a few dollars without giving full value will soon be found out as will the purchaser who renders false statements for the sake of securing an extra sitting of eggs free."

NEW ADVERTISEMENTS.

DR. JOHN BULL'S
Smith's Tonic Syrup
FOR THE CURE OF
FEVER AND AGUE
OR CHILLS AND FEVER,
AND ALL MALARIAL DISEASES.

The proprietor of this celebrated medicine justly claims for it a superiority over all remedies ever offered to the public for the cure of the AGUE, CHILLS, FEVER, and MALARIAL DISEASES. He refers to the entire Western and Southern country to bear his testimony to the truth of the assertion that in no case whatever will it fail to cure if the directions are strictly followed and carried out. In a great many cases a single dose has been sufficient for a cure, and whole families have been cured by a single bottle, with a perfect restoration of the general health. It is, however, prudent, and in every case more certain to cure, if its use is continued in smaller doses for a week or two after the disease has been checked, more especially in difficult and long-standing cases. Usually this medicine is required as an aid to keep the bowels in good order. Should the patient, however, require a cathartic medicine, after having taken three or four doses of the Tonic, a single dose of KENT'S VEGETABLE FAMILY PILLS will be sufficient. Use no other.

BULL'S SARSAPARILLA is the old and reliable remedy for impurities of the blood and venereal diseases—the King of Blood Purifiers.

DR. JOHN BULL'S VEGETABLE WORM DESTROYER is prepared in the form of candy drops, attractive to the sight and pleasant to the taste.

DR. JOHN BULL'S
SMITH'S TONIC SYRUP,
BULL'S SARSAPARILLA,
BULL'S WORM DESTROYER,
The Popular Remedies of the Day.

Principal Office, 331 Main St., LOUISVILLE, KY.

Eleven Importations Within the Last Twelve Months.

We have now on hand the grandest collection of

CLYDESDALE

AND

ENGLISH SHIRE HORSES

In America, and are the only firm that ever imported a CHAMPION WINNER AT THE GREAT LONDON GREAT HORSE SHOW. Prices moderate and terms to suit buyers. Send for new illustrated catalogue to

GALBRAITH BROS., Janesville, Wis.

MANUFACTURED BY
GIBBS GANG PLOW
J. A. HOFFMAN, General Agent,
Kalamazoo, Mich.
J11-17,22-115

LATEST IMPROVED
HORSEPOWER
Machinery for SAWING WOOD with Chain and Cross-cut Drag Saws, Also Hand-chained and Hand-cranked Saws and CLEANING GRASS.

Acknowledged by all to be
THE BEST
regarding
EASY DRAFT, DURABILITY & QUANTITY OF WORK
50 pages pamphlet
Free. Address
A. W. GRAY'S SONS,
PATENTERS AND SOLE MANUFACTURERS,
MIDDLETON SPRING, VERMONT.
J11-00-17

DELAWARE COUNTY
CREAMERY
We will pay Freight—
Write for our wholesale offer to first purchaser. Address
Delaware County Creamery Co.,
NEWTON HARBOR, MICH.
J11-17-21,27-21

THE GALE MANUFACTURING CO., ALBION, MICH.

Manufacturers of The Gale Chilled Walking and Riding Plows, Gang Plows, Horse Hay Rakes, Walking Cultivators, and other Farm Implements.
THE NEW GALE REVERSIBLE STEEL-BAR-POINT PLOWS.

These Plows are made with a Reversible Steel-Bar-Point 24 inches long. The Point is fastened to the base of the Plow by a 3-inch Steel Bolt in a Steel Nut. The Point can be adjusted to any condition of the soil by increasing or decreasing the length of Point, and retains same amount of suction at all times. When point is worn or beveled on under side it can be reversed, thus making it a positive self-sharpening Point. This is the greatest invention of the age. We also manufacture the ordinary style of Chilled Plows, both right and left-hand, with Straight and Sauting Landings. The Bearings and Hangers of the Plows made adjustable. Gale Patent Standard Joints and Knee Couplers conceded to be the best in use.

Gale Riding Cultivator.
The most complete Riding and Walking Cultivator on the market. Made with 4 or 6 shovels.
Gale Horse Hay Rake.
A Perfect Lock Lever Rake, with 27-inch Wide Double Cull Tooth. All castings made of Malleable Iron. Most Simple and Durable Rake made. A child can operate it as well as a man.

The Gale Sulky Plow.
Made entirely of Wrought and Malleable Iron. Chilled or Steel Bottoms. Has perfect Horse or Power Lift. Turns a narrow corner without raising the Plow from the ground. One-third less parts than any other sulky plow made.

Gale Walking Cultivator, No. 1.
Made with Extension Springs and can be adjusted to work Beans or Plants 26 inches apart. Simple and durable. Guaranteed to give entire satisfaction. All Cultivators made with Split Tongue.

Circulars sent on application. Correspondence Solicited. Address
GALE MANUFACTURING CO., ALBION, MICH.

THE BEST HARROW OR CULTIVATOR MADE

THE VERY LATEST AND BEST

Established 1854.

BUCKEYE SPRING TOOTH CULTIVATOR.

Many farmers favor level cultivation for corn, and there is a demand for a Lombed Corn Cultivator and Harrow of Fallow Cultivator. The machine represented by the cut is attached to our regular cultivator frame. Without the center teeth it is a complete Corn Cultivator and with the center attachment is a perfect Fallow Cultivator or Harrow.

ALSO MANUFACTURERS OF
Buckeye Drills, Seeders, Hay Rakes, One Horse Cultivators, Walking and Combined Cultivators, Cider Mills, etc.

P. P. MAST & CO.

SPRINGFIELD, OHIO.

BRANCH HOUSES:
Philadelphia, Pa., Kansas City, Mo.,
Portland, Me., Omaha, Neb.,
San Francisco, Cal., St. Paul, Minn.

"PLANET JR." HORSE HOES AND CULTIVATORS.

"PLANET JR." SEED DRILLS.

"FIRE FLY" WHEEL HOES AND PLOWS.

"PLANET JR." WHEEL HOES.

Will do the work of 6 to 10 men with the common wheel hoe.

Send for 1887 Catalogue giving full description and reduction in prices. S. L. ALLEN & CO., PHILADELPHIA, PA.

THE ROCHESTER GEAR PLOW

No one owning Farm, Vineyard, Hay Field or Orchard can afford to be without it. Will plow 5 acres per day easily. Adapted to all soils, and does not clog.

Agents Wanted. Send for Circulars.

ROCHESTER PLOW CO., ROCHESTER, N.Y.

WIDE-CUT
EUREKA
Centre-Draft
MOWER
SAVES
Time and Money

Warranted not to blow down the trees. Windmills have double the power of any other mower in existence. Will cut 10 to 15 tons of hay per acre and 20 to 25 tons of clover and timothy. Challenge any other mower to cut 10 to 15 tons of hay per acre and 20 to 25 tons of clover

NEW ADVERTISEMENTS. NEW ADVERTISEMENTS. NEW ADVERTISEMENTS.



ISLAND HOME STOCK FARM, GROSE ISLE, Wayne Co., Mich. SAVAGE & FARNUM PROPRIETORS.

IMPORTED & PURE-BRED PERCHERON HORSES. All stock selected from the get of sires and dams of established reputation and registered in the French and American Stud Books. New importations constantly arriving. We have one of the largest studs in the country to select from, including all ages, weights and colors, of both stallions and mares. Send for large illustrated cloth-bound Catalogue, free by mail. We have some fine high-grade stallions and brood mares not catalogued. Address, SAVAGE & FARNUM, Detroit, Mich.

LARGEST AND FINEST STOCK TREES CHOICE PERCHERONS AT LOW PRICES.

FRUIT and Ornamental, Grape Vines, Berry Plants, Shrubs, Roses, etc., at Wholesale and Retail. Catalogues Free. I. E. LITZKE & SONS, MONROE, NURSERY, MONROE, MICH.

THIRD ANNUAL SALE OF Shorthorn, Hereford & Holstein CATTLE, Wednesday, March 23, '87, The Michigan State Agricultural College, LANSING, MICH.

Choice animals and their progeny, imported direct from the Island of Jersey by Senator T. W. Palmer expressly for his Point Hill breeding establishment, Woodward Avenue, Detroit, and second to no other in this or any other country, it having stood the tests of comparison and competition at the great National Exhibitions of the American Percheron Horse Breckers' Association which was held in Chicago in 1886, and there securing the highest honors bestowed. At the head of the stud is Anchorite, the First Prize Stallion of his Class at the Exhibition, and of whom the Jury of award (consisting of representatives of the French, Ontario and United States Governments) impulsively exclaimed in their admiration, as he was led before them, "Marie Antoinette." Awarded the Gold Medal of France for Best Percheron Mare of any age bred in America. Also young mares awarded various prizes both in this country and at the great concours of France in 1886. No catalogue. Call at No. 4 Merrill Block, or address FORD STARRING, Detroit, Mich.

JERSEYS! GENERAL WOOLLEY AT THE HEAD OF THE HERD.

Choice animals and their progeny, imported direct from the Island of Jersey by Senator T. W. Palmer expressly for his Point Hill breeding establishment, Woodward Avenue, Detroit, and second to no other in this or any other country, it having stood the tests of comparison and competition at the great National Exhibitions of the American Percheron Horse Breckers' Association which was held in Chicago in 1886, and there securing the highest honors bestowed. At the head of the stud is Anchorite, the First Prize Stallion of his Class at the Exhibition, and of whom the Jury of award (consisting of representatives of the French, Ontario and United States Governments) impulsively exclaimed in their admiration, as he was led before them, "Marie Antoinette." Awarded the Gold Medal of France for Best Percheron Mare of any age bred in America. Also young mares awarded various prizes both in this country and at the great concours of France in 1886. No catalogue. Call at No. 4 Merrill Block, or address FORD STARRING, Detroit, Mich.

CHAMPION GOLD MEDAL STUD. 250 CLEVELAND BAYS AND ENGLISH SHIRES 250

The only stud that has won in one season at the greatest Horse Shows in America—Illinois State Fair and the American Horse Show of 1886—30 premiums amounting to nearly \$3,000 and including three GOLD MEDALS, Sweepstakes in both C. B. & E. S. classes and GRAND SWEEPSTAKES open to all the best breeders. Also Special Prize for best display of Shire Horses. The choicest in breed and individual merit. Call for illustrated Pamphlet, or better come and see us. GEO. E. BROWN & CO., Aurora, Kane County, Illinois.

Door Prairie Live Stock Association DOOR VILLAGE, LA PORTE CO., IND.

Choice stock selected by one of the first men of the West, and quality, combined with good pedigree, breeding and individual merit. One Hundred Stallions and Mares to select from. Also Colts from imported sires and dams and grades of our own breeding. Call and see them. Correspondence solicited. Prices reasonable. Address as above.

Merrill & Fifield, Bay City, Mich. HEREFORD CATTLE!

The Michigan Herd of Prize Winners. At the head stands Clarence Grove (7909), an imported son of the Grove 3rd, dam Ruby by Spartan (5009); assisted by Tom Wilton (3842), son of the great Lord Wilton and full brother to Mr. Bertram's Sir Wilfred. Such cows as Love 1st, Fairy Lady 2d, Grace 3d, Fair Maid 4th by Hancock 25th, Greenhorn 34th by Fairy Prince, Barcelona Queen by Horace 5th, three grand heifers by Heddon (665), all others of equal merit, compose the breeding herd.

Choice Young Stock For Sale at Reasonable Prices. Write for Particulars.

One yearling bred by Lord Kirklevington of Erie and one two-year-old by the same sire. We also have one registered Jersey bull for sale. J. H. HAWAY, Port Huron, Mich.

WANTED. A gentleman owning a small farm, engaged in the cultivation of small fruits and raising poultry, and who is absent a large part of the time, wants a man and wife with no children to reside with his family and do the necessary work in the house and on the place. Liberal salary and steady employment to suitable parties. State experience and references. Address by letter, "B," 185 Jefferson Ave., Detroit, Mich.

WANTED. A first class farm hand to work on a farm and take care of stock, by the month or year. Would prefer a man with small family to whom a good tenement house and garden will be furnished. Address Box 288, Ypsilanti, Mich.

SHORT HORNS FOR SALE. Bulls, heifers, cows and calves of choice milking strains and bred by high-bred bulls. For particulars address B. J. BIDWELL, Tecumseh, Mich.

THE BUCKELL SAFETY CLEVIS. GOLD BY FIRST CLASS DEALERS. NEAT, DURABLE, SIMPLE, CHEAP AND ABSOLUTELY SAFE. Can be used on any horse. In use for years. Farmers, lumbermen and teamsters generally will not be without them. Made in all sizes. Ask for Buckell's Safety Clevis, and take no other. Send card for Circulars and Testimonials. J. B. WHITFIELD, Pontiac, Mich.

ISLAND HOME Stock Farm, GROSE ISLE, Wayne Co., MICH. CITY OFFICE: CAMPAU BUILDING, DETROIT, MICH. SAVAGE & FARNUM, Proprietors.

Holstein Friesian. We have for sale a few extra fine Young Holstein Bulls & Heifers. With Best Milk Record Ancestry. Write us for terms and prices.

CLYDESDALE. The following families represented in the herd: Cruickshank, Rose of Sharon, Flat Creek Young Mary. Inspection is invited. Stock for sale at reasonable prices. Every animal guaranteed as represented. The prospects for Shorthorns are better to-day than at any time in the past five years. J. E. EVELL, Eagle, Mich.

Pure-Bred Bronze Turkeys For Sale. A few more for sale at reasonable prices: bred from birds weighing 10 lb. at 10 weeks, 15 lb. at 12 weeks, 20 lb. at 14 weeks. Will also take orders for eggs. J. E. EVELL, Eagle, Mich.

LIVE STOCK & REAL ESTATE AUCTIONEER. Sales made in any part of the United States or Canada. Terms reasonable, and made known on application. J. A. MANN, Kalamazoo, Mich.

DIRECTORY OF MICHIGAN BREEDERS

CATTLE—Shorthorns.

A. CHANDLER, breeder of Shorthorn cattle. Shorthorn sheep and Essex swine. a.e. Correspondence solicited. Jerome, Mich.

D. DeGARD, Highland, Oakland Co., breeder of Shorthorn cattle. Stock farm half mile north of station. Young stock for sale at reasonable prices. my15-6m

J. COOK, Owasco, breeder of Shorthorn cattle. Both sexes now offered for sale at reasonable prices from this splendid herd. Address P. W. NIXON, West Bay City, Mich. 18-67

P. COOK, Brooklyn, Jackson Co., breeder of Shorthorn cattle. Good families represented. Bull Major Crags at head of herd. Choice young stock for sale. my15-6m

R. H. ANDERSON, Monticello, Allegan Co., breeder of Shorthorn cattle. Established 15 years, with Romeo 37th by 3rd Duke of Alford and Minkie's Duke by Garrison Duke 3d at head. Correspondence solicited. my15-6m

B. F. RAYMOND, Ocoee Center, Livingston Co., Mich., breeder of Shorthorn cattle. Herd consists of Young Marys and Phyllis Young bulls and heifers for sale. Also Merino sheep. Terms reasonable. my15-6m

G. L. GLENN, Highland, Branch Co., breeder of Shorthorn cattle. Families in the herd: April Morris, Phyllis, Minkie, Rose of Sharon and Blossoms. Correspondence solicited and promptly answered. 14-6m

CHARLES F. MOORE, breeder of pure bred Shorthorn cattle. St. Clair, Mich. Stock for sale. Correspondence promptly attended to. 14-6m

CHARLES F. MOORE, Lakeville, Livingston Co., Mich., breeder of Shorthorn cattle. Herd headed by Bates bull Barren, Belle Bates cow, Belle Duchess, Minkie's Victoria, Stapleton Lass, Sallina and Bright Eyes families. Young stock for sale. June-17

C. H. BARNES & SON, Bennington, Seneca Co., breeder of Shorthorn cattle. Shorthorn sheep and Merino sheep. All stock recorded. Stock for sale. 14-6m

R. B. BACKUS, Springdale Stock Farm, Williamson, Ingham Co., breeder of thoroughbred Shorthorn cattle. Herd headed by Merino sheep and Percheron horses. Stock for sale. Correspondence solicited. 14-6m

DAVID F. WILCOX, Forest Hill Stock Farm, breeder of thoroughbred Shorthorn cattle. Improved family of 500 acres, with good buildings for sale. Twelvefold address: 14-6m

M. UHL, Brookside Herd, Ypsilanti, choice making qualities for sale. Correspondence solicited. 14-6m

E. S. BURNETT & SON, breeders of Shorthorn cattle. All stock registered. Residence, four and a half miles east of Bancroft, Shiawassee Co. Also among them is the beautiful "Marie Antoinette." Also among them is the beautiful "Marie Antoinette." Also among them is the beautiful "Marie Antoinette." 14-6m

F. A. BRADEN, Victoria Stock Farm, Bancroft, Shiawassee Co., breeder of pure bred Shorthorn cattle. Herd headed by Bates bull Barren, Belle Bates cow, Belle Duchess, Minkie's Victoria, Stapleton Lass, Sallina and Bright Eyes families. Young stock for sale. June-17

G. W. ALMS, Portland, breeder of Shorthorn cattle. The Young Mary and other popular strains of blood. Young bulls for sale. 14-6m

G. H. RICHARDSON, Pleasant Hill Stock Farm, Sandusky, Jackson County, breeder of Shorthorn cattle. Herd headed by Bates bull Barren, Belle Bates cow, Belle Duchess, Minkie's Victoria, Stapleton Lass, Sallina and Bright Eyes families. Young stock for sale. June-17

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

H. H. BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. 14-6m

Holstein-Friesians.

CHAS. F. GILLMAN, "Fonded Stock Farm" Pawman, breeder and dealer in thoroughbred Holstein-Friesian cattle and Merino sheep. 18-67

C. V. BEEKLEY, North Farmington, Oakland Co., breeder of Holstein-Friesian cattle. Stock farm of the famous Vienna family. Vienna 285 (D. F. Hart) at head of the herd. Correspondence will receive prompt attention, unless otherwise stated. 18-67

P. R. PHILLIPS, Bay City, breeder and importer of Holstein-Friesian cattle. Correspondence solicited. Intending purchasers invited to call and inspect stock. 18-67

J. M. STELLING, Monroe, breeder of pure Holstein-Friesian cattle. Stock for sale. Correspondence and personal inspection solicited. 18-67

NOOKHOLMOKA HERD of Holstein-Friesian cattle. Both sexes now offered for sale at reasonable prices from this splendid herd. Address P. W. NIXON, West Bay City, Mich. 18-67

STONE & HIGGS, Hastings, breeders of thoroughbred Holstein-Friesian cattle. John 912 by Ebb at head. Stock for sale. Write for prices and catalogue. 18-67

W. B. CLARK, Highland, breeder of thoroughbred Holstein-Friesian cattle. Merino sheep. Stock for sale. 18-67

W. B. SEKTON, Howell, importer and breeder of thoroughbred Holstein-Friesian cattle. Stock farm, three miles south. 18-67

BATES & MARTIN, Grand River Herd of Jerseys. Old Noble and Albert 4th families. Choice young stock for sale. Address, No. 10 Canal St., Grand Rapids. Farm five miles east of city. 18-67

SMITH BROS., Eagle, Meadow Brook east of city of Jersey. Stock of the highest quality and of best strains. - Holstein-Friesian. 18-67

W. J. G. DEAN, Hanover, high-class Jerseys. Also strains. Pedro Star 11850, son of Pedro Star at head of the herd. Registered Merino Sheep. 18-67

Herefords. EDWIN PHILLIPS, Maple Place Farm, Pontiac, Oakland Co., breeder of Hereford cattle. One of the most popular strains. Waxed 620 (620) at head of stock of both sexes for sale at reasonable prices. 18-67

R. G. HART, Lapeer, breeder of Percheron, Hereford and Galloway cattle; Merino sheep and Chester hogs. Farm adjoining city limits; residence and breeding and sale stable in city. Stock for sale; visitors welcome. 18-67

RYDERDALE STOCK FARM, Metamora, Lapeer Co., Hereford cattle, Merino sheep, and Berkshire swine. All stock registered. Correspondence solicited. Address M. Wickham, Manager. 18-67

THOMAS FOSTER, Elm Grove Stock Farm (Flint, Genesee Co., breeder of Hereford cattle. Lord Warwick 3d at head, Cotswold and Shropshire Sheep, Hampshire and Southdown Trotting hogs, with stallions Flint and Mantrio (Jr.), in the stud, with eleven mares of blood and Hambletonian breeding. 18-67

R. E. CARUS, Essex, Clinton Co., St. Johns N. F. O. breeder of Galloway cattle, American Cattle and Essex hogs. Correspondence solicited. 18-67

SHEEP—Merinos. A. WOOD, Saline, breeder of thoroughbred Merino sheep. A large stock always on hand. Also Poland-China hogs; herd started from B. G. Buell of Little France. Also of W. H. Harrington, of Paw Paw. 18-67

C. E. LOCKWOOD, Washington, Macomb Co., breeder of registered Merino sheep. A large stock always on hand. Also of W. H. Harrington, of Paw Paw. 18-67

E. BURKINGHAM & SON, Byron, Shiawassee Co., breeders of registered Merino sheep. Stock for sale. Correspondence solicited. 18-67

E. B. WELCH, Paw Paw, breeder of thoroughbred Merino sheep. A large stock always on hand. Also of W. H. Harrington, of Paw Paw. 18-67

F. M. DEAN, Maple Avenue Stock Farm, Paw Paw, Mich., breeder and dealer in improved American Merino sheep. All stock registered and descended from Vermont. Also registered Poland-China swine. Stock for sale. Correspondence solicited. 18-67

G. L. HOTT, Saline, Washington Co., breeder of Merino sheep. Stock for sale. 18-67

J. A. GIBNEY, Kalamazoo, breeder of registered Merino sheep. Stock for sale. Correspondence solicited. 18-67

JAMES McCREGG & SON, Metamora, Lapeer Co., breeders of registered Merino sheep. Stock for sale. 18-67

J. O. THOMPSON, Romeo, Macomb County, breeder of registered Merino sheep. Stock for sale. Correspondence solicited. 18-67

J. EVARTS SMITH, Ypsilanti, breeder of registered Merino sheep. Stock for sale. Correspondence solicited. 18-67

J. S. ROGERS, Saline, Washington Co., breeder of registered Merino sheep. Stock for sale. 18-67

J. S. WOOD, Saline, Washington Co., breeder of registered Merino sheep. Stock for sale. 18-67

R. W. NILES, Maple Ave. Stock Farm, Saline, Washington Co., breeder of registered Merino sheep. Stock for sale. 18-67

R. HATHAWAY, Addison, Lenawee Co., Mich., breeder of registered Merino sheep. Stock for sale. Correspondence solicited. 18-67

S. O. LOMBARD, Addison, Lenawee Co., breeder of registered Merino sheep. Stock for sale. Correspondence solicited. 18-67

S. O. HADLEY, Unadilla, Livingston Co., breeder of registered Merino sheep. Stock for sale. Correspondence solicited. 18-67

W. M. O. SMITH, Brookside Farm, breeder of registered Merino sheep. Stock for sale. The stock of this part of the State. Stock for sale P. O. Carson, City, Montcalm County, Mich. 18-67

Shropshire-Downs. EMERY A. GARLOCK, Howell, breeder and dealer in imported and Michigan bred Shropshire sheep. Foundation 30 recorded ewes out of Wesley J. Garlock's flock. Write for particulars. 18-67

GARLOCK'S imported and Michigan bred Shropshire sheep are the popular nation and wool breed. Old established in Michigan. Unexcelled by any. Cheapest stock at moderate rates. Wesley J. Garlock, Howell, Mich. 18-67

J. F. RUNDLE, Birmingham, Oakland Co., importer and dealer in thoroughbred Shropshire sheep. Stock registered. I import my sheep direct from England. Correspondence promptly answered. 18-67

J. LESLIE, Jersey, Oakland Co., breeder of registered Merino sheep. Stock for sale at reasonable prices and terms. 18-67

LEWIS WILKEY, Pawman, Ionia County, breeder of registered Merino sheep. Stock for sale. The nation sheep of the world. 18-67

ROBERT E. SMITH, Howell, breeder of registered Merino sheep. Stock for sale at reasonable prices and terms. 18-67

T. A. HIXBY, Lake View Stock Farm, South Haven, breeder of registered Merino sheep. Stock for sale. All my breeders are recorded in the American Berkshire Record. Write for prices, 18-67

A. W. COOLEY, Coldwater, Branch Co., breeder of pure Berkshire hogs of the largest size and very best strains. Pigs and young breeding stock for sale. Correspondence promptly answered. 18-67

EDNA BROWN, Englewood, Kent County, breeder of Berkshire swine. The best known recorded stock. Stock for sale. 18-67

For Sale—Farms and Farming Lands in the Saginaw Valley—the best farming lands in Michigan. Address: H. P. SMITH, East Saginaw. 18-67

Poland-Chinas.

A. BOWEN, Wixom, breeder of pure-bred Poland-China swine. All breeders recorded in Ohio P. C. Record. Choice stock for sale. 18-67

C. A. LIMBECK, Dowagiac, breeder of pure Poland-China swine. Choice sows bred to my first prize boar at Jackson, 1886, to farrow in April, for sale cheap. Write for prices. All stock recorded. 18-67

G. HAYES, Ithaca, Gratiot Co., breeder of pure-bred Poland-China swine. Stock recorded in Ohio Poland-China Record. Young stock for sale at prices to suit the times. 18-67

C. W. JONES, Richland, breeder of pure-bred Poland-China swine. My breeding stock all recorded in both the Ohio and American Poland-China Records. 18-67

G. F. HARRINGTON, Paw Paw, breeder of pure-bred Poland-China swine. All stock in Ohio P. C. Record. Breeding stock not for sale. Also breeding registered Merino sheep. Correspondence invited. 18-67

C. W. INMAN, Ypsilanti, Washtenaw Co., breeder of Poland-China swine of the most popular strains. Some superior young pigs for sale cheap. Also Merino sheep. All stock bred from recorded animals. Correspondence solicited. 18-67

H. W. RILEY & CO., Greenville, Montcalm Co., breeders and shippers of Poland-China swine, all recorded in Ohio Poland-China record. Correspondence solicited. 18-67

C. A. SEARING, Lyons, Ionia Co., breeder and shipper of Chester White swine, Oxford Down sheep and Shorthorn cattle. All stock recorded in Ohio Poland-China Record. All stock inspected and sold by express. 18-67

W. W. TUBBS, Delhi Mills, Washtenaw Co., breeder of pure Suffolk swine. Choice stock for sale. Correspondence promptly answered. 18-67

Duroc-Jerseys. JOHN W. FOSTER, Flint, Genesee County, breeder and shipper of pure-bred Duroc-Jersey swine, registered Alwood Merino sheep and black-breasted red game fowls. 18-67

HORSES—Draft and Trotting. A. W. HAYDON, Detroit, Van Buren Co., breeder of full-blooded Percheron horses. One of the best of the breed is imported Chere, winner of four first prizes and gold medals in France, including a first prize and gold medal at the first Universal Exposition of Paris in 1878. Also thoroughbred horses. Stock for sale. 18-67

H. C. BENTON, "Maple Hill Side," Northville, Wayne County, breeder of draft and trotting horses, with Walter H. a Percheron, Captain, a coach, and the trotter Neptune and Josiah Miller in service. 18-67

R. G. HART, Lapeer, breeder of Percheron, Hereford and Galloway cattle; Merino sheep and Chester hogs. Farm adjoining city limits; residence and breeding and sale stable in city. Stock for sale; visitors welcome. 18-67

RYDERDALE STOCK FARM, Metamora, Lapeer Co., Hereford cattle, Merino sheep, and Berkshire swine. All stock registered. Correspondence solicited. Address M. Wickham, Manager. 18-67

THOMAS FOSTER, Elm Grove Stock Farm (Flint, Genesee Co., breeder of Hereford cattle. Lord Warwick 3d at head, Cotswold and Shropshire Sheep, Hampshire and Southdown Trotting hogs, with stallions Flint and Mantrio (Jr.), in the stud, with eleven mares of blood and Hambletonian breeding. 18-67

R. E. CARUS, Essex, Clinton Co., St. Johns N. F. O. breeder of Galloway cattle, American Cattle and Essex hogs. Correspondence solicited. 18-67

SHEEP—Merinos. A. WOOD, Saline, breeder of thoroughbred Merino sheep. A large stock always on hand. Also Poland-China hogs; herd started from B. G. Buell of Little France. Also of W. H. Harrington, of Paw Paw. 18-67

C. E. LOCKWOOD, Washington, Macomb Co., breeder of registered Merino sheep. A large stock always on hand. Also of W. H. Harrington, of Paw Paw. 18-67

E. BURKINGHAM & SON, Byron, Shiawassee Co., breeders of registered Merino sheep. Stock for sale. Correspondence solicited. 18-67

E. B. WELCH, Paw Paw, breeder of thoroughbred Merino sheep. A large stock always on hand. Also of W. H. Harrington, of Paw Paw. 18-67

F. M. DEAN, Maple Avenue Stock Farm, Paw Paw, Mich., breeder and dealer in improved American Merino sheep. All stock registered and descended from Vermont. Also registered Poland-China swine. Stock for sale. Correspondence solicited. 18-67

G. L. HOTT, Saline, Washington Co., breeder of Merino sheep. Stock for sale. 18-67

J. A. GIBNEY, Kalamazoo, breeder of registered Merino sheep. Stock for sale. Correspondence solicited. 18-67

JAMES McCREGG & SON, Metamora, Lapeer Co., breeders of registered Merino sheep. Stock for sale. 18-67

J. O. THOMPSON, Romeo, Macomb County, breeder of registered Merino sheep. Stock for sale. Correspondence solicited. 18-67

J. EVARTS SMITH, Ypsilanti, breeder of registered Merino sheep. Stock for sale. Correspondence solicited. 18-67

J. S. ROGERS, Saline, Washington Co., breeder of registered Merino sheep. Stock for sale. 18-67

J. S. WOOD, Saline, Washington Co., breeder of registered Merino sheep. Stock for sale. 18-67

R. W. NILES, Maple Ave. Stock Farm, Saline, Washington Co., breeder of registered Merino sheep. Stock for sale. 18-67

R. HATHAW

Poetry.

DAKOTA'S INVITATION.

Send 'mid the snow-drifted prairie
By rivers' death ice-robes at rest,
And turn from the dreams of past ages,
From the nations who fed at my breast,
From visions of barbarous warfare,
From labors whose field was the chase,
From ambitions whose needs die forever
With those of a perishing race;
Be idle and joy-lightened sorrow,
From the millions forever at rest
I look toward a brighter tomorrow
From my realm of the Golden Northwest.
I turn from the picturesque memories
Of the fierce, wild and passionate past,
From the rites and the worship of ages
Too savage and simple to last.
The march of the noblest of races
The rush of the prairie fire's sweep,
From tortures and mysteries nameless,
From hatred unending and deep;
And the long line of warriors and sages
Who knew neither mercy nor fear,
Remotes through the vistas of ages
Growing dim till the last disappear.
And I beckon to every nation,
I summon from every land
The heroes of that mighty migration
Which throngs to the old world's worn sand;
From Scotia's grand heather-clad mountains,
From Norway's deep fjords and blue hills,
From Gallia's vine-shaded fountains,
And Siberia's valleys and hills;
From Denmark's bold shore and the lowland
Which Holland holds back from the sea;
I summon the mighty procession
Whose future and hopes lie with me.
From each shore and city of England
From Russia's huge steppes, and the drear
Volcano's swept deserts of Iceland
My vessels are hastening here.
The Puritan's sons and daughters
Of pilgrim and cavalier take
Their way o'er the river and waters,
By prairie and fiver and lake
To join in one common endeavor
To mingle as years go and come,
And claim as the meed of their labor
One language, one country, one home.
I have homes for the homeless, and honor
For him who is lowly of birth;
I have land for the landless, and labor
That bringeth not sorrow but mirth;
Riches where the bright gold is hidden,
Broad acres by share never broke,
Boundless pasture where grass unbidden
Yields unused to halter or yoke,
Green meads where rose, violet and lily
Bloom, and delicate tendrils entwine
And rivers meandering still
"North broad boughs and clambering vines.
Come then from the o'er-crowded cities,
The perils and the toils of the sea,
From fields that are barren and stony
To the pastures so fertile and free;
From faith lost in blind superstitions,
From hope overborne by despair,
From the thrall of ancient traditions,
And burdens too heavy to bear.
Come from misery, servitude and sorrow
To fortune and peace and rest,
Ye heirs of the brighter tomorrow
Of my realm of the Golden Northwest.
Already the brief days grow longer
As northward the life-giving sun
Moves his rays, day by day waxing stronger
Till the reign of stern winter is done;
Soon white drifts will melt from my bosom
And the prairie anemone show
Her green buds and delicate blossoms
Where now gleams the frost-jeweled snow.
As the snow melts away, I, Dakota,
Feel past life effaced from my breast,
As I welcome a new race of myriads
To my realm of the Golden Northwest.
J. C. EWEN.
MAYVILLE, DAKOTA.

Miscellaneous.

MONSIEUR LE CURE.

I met the Cure one evening as I was returning home from the wood, where I had been sketching. The fine old man was standing on the doorstep of his presbytery, looking towards the sea, which at that moment was glorious beneath the setting sun. I bowed to him as I passed, for his presence had always inspired me with sympathy and respect, and I knew how much this tribute from a foreigner would gratify a member of that class which the republican government is bringing into disrespect by constant persecutions.
He returned my salute with such kindly courtesy that I took the opportunity, which I had long desired, of speaking to him.
"A lovely sight, Monsieur le Cure," I said, pointing to the sea.
"It is, indeed, monsieur," he answered without looking around. After awhile he added: "It is such sights that reconcile one to this earth. And yet I do not know; one has always the bitter certainty that very soon the night will come, when all will be dark."
"And, en attendant," I said, trying to laugh away his evident melancholy, "if I do not get home soon the night and her darkness will come most certainly; and it's a break-neck path to my house."
"But, monsieur," said the Cure, "there is no hurry. I heard from the village people that monsieur had expressed the desire to visit our church. There is, indeed, little to see, but if—"
"I should be most delighted," I answered.
"I will get the key," he said, leading me into his simple parlor, and bidding me sit down while he went upstairs to fetch it.
The room was one of the poorest in point of decoration and furniture that I had seen in any house in the village; and yet there was one object which by its great beauty compensated for all the unloveliness of the rest. It was the picture of a young woman, painted in oils, and signed by a painter who about thirty years ago had been at the summit of his art. The girl represented was most lovely, and it seemed to me that her face was one which had been the model of many other artists as famous as the one who had painted this portrait. A royally feminine face, and here clothed with that expression of timidity, blushing and afraid, which in some women is so sweet and so strongly appeals to all that is noblest and most manly in man.
This was my first impression, but as I looked at it longer the timidity, from being subjective merely, seemed to grow objective. It was not a timid girl, it was a girl afraid. Her eyes seemed to look with horror, for on still closer observation, the fear grew into horror, of something that was not represented in the picture. How could it be, seeing that those fearful eyes were looking out of the plan, straight over my head, who stood facing her, at the wall behind

me? The picture was by far too fine a work of art for one to suppose that any attempt had been made to enhance its interest by an extraordinary and theatrical mis-en-scene, and I felt it would be an insult to the great painter to turn round and see if anything was visible to explain the expression of those eyes. Moreover, it was the expression that held me, not the reason thereof. I am not one of those who seek in every picture an illustration.

I stood before it some time, sadly envious of the technique of the departed hand, and wondering what angel hand, the angel Raphael's perhaps, had guided the painter's fingers when he had mixed the colors of sun-kissed auburn that shone, and color sang, from those clustering curls of hair, when the Cure came back into the room. I turned as I heard his step, and as I did so my eyes fell upon the wall on which my back had been turned. Directly opposite the picture, and in the point of vision of its eyes, hung a rapier. As I looked closer I saw that the point of this sword was black, of that ill-omened black that blood, long since shed, does take.

I almost felt angry. Blood-stained rapier or chromo-lithograph of some hobgoblin ghoul or spectre, it annoyed me to think that any one should have ventured, with the most vulgar taste of melodramatic effect, to complete what was already so sublimely and perfectly complete. It was the threat of a burglar, of the bourgeois, uneasy and disturbed if the Sevres china statuette of a Watteau shepherdess on this side of his Louis XV timepiece has not, on the yon side of it, fronting her, as pendant, a languishing Cordon.

My annoyance was so real that I paid but little attention to all that the Cure, who had now greatly sunk in my esteem, showed me and told me. I vaguely remember that he led me through a churchyard, where, by the grave of his predecessor, he pointed out the plot of ground where he was to rest himself: that he told me that the church was many hundred years old and had been *sans lemps*, the lodge of a company of Knight Templars, whose bodies lay shrouded in stone sepulchres in a remote part of the cemetery. The church was very uninteresting to me in my preoccupation. There were some fine Louis XI candlesticks in massive copper on one of the altars. The Cure had bought them from a dealer in old metals, to whom an ignorant colleague had sold them at the rate of ninepence the pound.
"Then you have some taste," I thought, "but that only makes it more execrable."
It was examining these candlesticks when a peasant girl came up to me, and with many clumsy courtesies told M. le Cure that his sapper had been served.
She had a motherly tone with the old man, this girl of fifteen, and would not bear of his showing me the vestry.

"That will be for another day," she said.
"The important thing is now that M. le Cure should not let that beautiful trout get cold. One has opened a bottle of Chablis to drink with it, and there will be an omelette and some peaches in the second service."
"She seems a very intelligent child," I said, as I accompanied the Cure to his door.
"Is she your servant?"
"Oh, no," he answered with a smile.
"That would not be allowed. My servant is ill in bed, and this girl is taking her place. But no, monsieur, I cannot let you go now. You must come in and share my supper. Jeannette, lay another cover."
"I did that in advance," answered the girl. "When M. le Cure has visitors."
"He insists on their becoming his guests. You are right, and monsieur sees it."
The trout, perfectly cooked, was firm and sweet; the Chablis cool and fragrant, with a faint scent of violets, gleamed like liquid gold in my glass, the table was exquisitely laid; the silver, the plate of peaches, the yellow rose laid on the white cloth, were very beautiful to the eye; the Cure, with his melodious voice, full of caressing notes, charmed my ear, as his anecdotes and wit delighted my mind. But all these lights were powerless to distract my attention from the annoyance I had experienced. My calm was marred. I barely listened to my host, yet gave him enough attention to regret my preoccupation. At another time his conversation would have charmed me, who for many months had heard only the sordid bargains of the Norman peasants in their drawing and inhumane parlors.

He had been speaking about the Oxford revival, and had quoted the Pope's remark on the Puseyites, that like bell-ringers they invited the world to come in to the Holy Church, but themselves did not enter it, when, unable to contain myself any longer, I rudely interrupted him, saying, "But why vulgarize her glorious passion? Why make her sublime fear paltry and ridiculous? One annoys the timidity of children with blood-stained rapiers, skulls or chromos of 'Fox's Martyrs.' They cannot explain her terror. They only insult her."
The Cure smiled, and seemed at once to understand what I was referring to.
"You are right, monsieur," he said, "it is in bad taste. But it is Bette's fault, not mine."
"Bette," he continued, "is my old servant, the one who is lying ill upstairs. She has been most faithful and devoted to me ever since she came to this place, now twenty years ago. I used to keep that rapier in my bedroom, but it was not long before she found it where you saw it. The arrangement has always rather spoiled my pleasure in the picture, and my reason is the same as yours; but I could not find it in my heart to thwart the good old woman's wish. She would have it thus, and would take no contradiction on this point."

"I suppose," I rejoined, "the good woman was vexed at the sight of the girl frightened at nothing. The blood-stained sword would explain this fear, and make the tableau complete. But I should have been better pleased with Bette if she had completed it in another way. For instance, if she had hung opposite those terrified eyes a picture by Delacroix or another classic. That would have explained, and charmingly, the horror of a creation of M—'s."
"You are severe on Delacroix," laughed the Cure. "In my time he was to us what Melancthon is to you to-day."
"May I ask, monsieur," I said, "if there is any connection between the picture and the weapon?"
"A terrible one," said the Cure.

His tone was so sad, and there was such a sorrowful expression on his face as he answered me, that I regretted my indiscretion and apologized to him for it.
"It is strange," he continued, after a pause, "that you should ask me this to-day, for all this day my thoughts have been going back to the most terrible scene of my life. Nay, do not ask my pardon. I am glad to speak to you of it. Silence does not kill a sorrow, it nurses it, I know it. For thirty years I have never opened my mouth, and the wound in my heart has deepened all the more. Never, never reserved on the troubles of your life. Rather cry them out aloud on the houseposts. Does not a cry relieve a bodily suffering? Then why should not the same relief be afforded in the same way to the tortures of conscience? Ask for sympathy, human sympathy, and whether you get it or not, the mere asking will comfort you! I will tell you about that rapier and that picture. My heart has been very full to-day."

Then, bending over the table to me, he said:
"That picture is the portrait of the only woman I have ever loved, and that rapier is the sword with which I killed my dearest friend. The blood on its point is the blood of the only heart of man that ever beat in love and sympathy with mine."

"Ah," he continued, "you look surprised. One does not suppose any romance can be enshrined beneath the sustenance of a village cure, and, perhaps, to look at me, I appear the very last man to have had a drama of so terrible a kind in my life. Yet, I am told, they made a very good play of it at one of the boulevard theatres in Paris. The world had the comedy, the tragedy was for me. It was just, quite just. My story? Oh! a common one. He was my friend, she, the lovely woman, was his wife. We had both paid court to her, but he had won her. He was richer than I, and in France, you know, that is the first consideration of parents in giving their daughter. Well, though I loved her with all my heart, when she became his I was loyal to her as to him, as a gentleman and his friend. Of course I sought her society—it was natural, was it not, that I should do so? Ill-advised, oh, ill-advised—nobody else that better than I do now. But I swear, if I swear I might, that my loyalty to him and to her never, even in thought, wavered an instant. The world, the wicked world, thought otherwise; and wicked tongues went wagging. He was my best friend, and I loved him like a brother—and all the more dearly that he was her husband. Yet how could I act otherwise than I did, when one day, urged on by these wicked tongues, he rushed up to me on the boulevard and struck me in the face, calling me liar, traitor, coward. It was done in the eyes of Paris, and I was hot-blooded in those days. It was a provocation, a challenge, which I was forced, as I thought then, to accept."

"We fought next morning in the Bois de Vincennes. It was an accident—yes, that thrust of mine was an accident, I shall always say so. He ran upon my point. I could not help myself. But, oh, the horror of that moment! The artist who painted that portrait was one of those who took my Paul home. He told me that she looked thus when she saw him as I had made him. As for me, I went for many months a crazed man. I think I was my great-uncle, the Bishop of T—, who first suggested to me that, if any atonement for my crime there could be, it would be in the devotion and services of a lifetime. I took his advice, for I was weary of the world, passed through the ordeal of the novice, and was ordained. My uncle gave me this presbytery, and here I have lived and worked for thirty years, humbly, obscurely and penitently. I have not atoned—no, I have not atoned; but I sometimes think that Paul knows all now, and—perhaps, has forgiven me."

"I never saw her again. I never heard of her. Is she dead? did she marry again? did she, as some said she intended to do, retire to a convent? I do not know. I have never ceased to love her, as I did then, loyally and devoutly; not as the woman I had wanted to marry, but as the wife of my friend, as my dear Paul's wife."
I said nothing. I felt sorry now to have called forth this confession. The quiet despair of this old man as he told me the misery of his ruined life was a poignant sorrow to the eye and to the ear. When he had finished speaking he sat with his hand covering his eyes. I fancy there were tears in them.
We were sitting thus in silence in the darkening room, when the little maid came running in.
"Monsieur le Cure, Monsieur le Cure!" she cried. "Come quickly—come quickly! Old Bette is dying. She calls for you."

"Oh! do not say that," cried the Cure, starting to his feet. "Do not say that. My old Bette! My faithful old servant! No, it cannot be that after twenty years of loyal service and sacrifice I am to lose her now."
"It is very certain, mon pere," said the trembling girl, "that old Bette is dying. She says so herself, and I can see that she is right, for she looks just like a mere manon died before she died. And she begs Monsieur le Cure to come to her at once."
"I come, I come!" cried the old man in tones of anguish. "But a doctor, Jeannette, the doctor! Run for him. Oh, that is useless, of course. He lives ten miles away. What shall we do? What will become of us?"

"I have studied medicine," I said. "I may be able to be of some assistance. If Monsieur le Cure will permit, I—"
"Come, come!" he cried, clutching me by the arm. "It is the blessing of Providence. Is there anything you want? It is disease of the heart. Now, then, come. But first, Jeannette, run upstairs and see whether monsieur can enter."
The girl had turned to enter to obey, when through the silence of the house there rang the awful notes of a dying woman's voice.

"Raoul, Raoul! where are you? Je me meurs, mon ami!"
It was the voice of a high-born lady. For what reason I know not, I turned towards the picture. It seemed the cry that should come from those lips.
The Cure had started like a man who is suddenly stabbed.
"Mon Dieu, mon Dieu!" he cried, "Whose voice is that?"

And with this cry he turned towards the picture.
"Raoul, Raoul! You must come quickly, or it will be too late!"

"It is old Bette that is calling you, Monsieur le Cure," said Jeannette, pointing to the room above. "It is her voice, is it not?"

"Bette?" stammered the Cure, "the old peasant woman? No, no, no! It was Mireille's. But—"

"Meanwhile, Monsieur," said Jeannette, "the old woman dies."
"I go," said the Cure.

I did not follow him; I had some feeling that there would be something solemn—something sacred was to be revealed in this last interview between the old Cure and his dying servant. I knew that, great as may be the devotion and self-sacrifice of the man, the self-sacrifice and devotion of the woman that loves him, or has loved him, can be immeasurably greater, and I believed that the Cure would find out that his life-long penance had had even on this earth its passing great reward, and that the love of the woman he had worshipped in his youth had been with him and around him, silent, watchful, all these years.

"It would have been a splendid devotion," I said to myself, as I made my way home, "and one possible only in a woman, to humble herself as he had humbled himself—yet lower, to leave the boudoir of the woman of the world for the kitchen of a village presbytery; to put off the elegant toilet and to put on the peasant's gown, and, more than all this, to live by his side, unknown to him, respecting his loyalty to the dead—it was sublime."

A year later I visited P— again. They told me that the old Cure had died about two months ago. I saw his grave in the churchyard, but it was not in the spot that he had laughingly pointed out to me when he had shown me the church. I found it hidden away in a corner, from which a splendid view of the sea could be obtained. There was another grave by his side, adorned with a simple white cross, on which was written the one word, "Mireille."—*Belgravia*.

Martyrs of Science.

The scientific investigator, says the New York Tribune, and notably the experimenting chemist, incurs dangers that would be likely to appal the most valiant fighters, and he meets them calmly and deliberately, not in hot blood and excitement. Familiarity with danger breeds recklessness, if not contempt, and the chemist will coolly taste with the tip of his tongue any unknown liquid that may be handed to him. Prussic acid is about the only thing he will not put into his mouth, but he can recognize that without tasting it. He will make all sorts of chemical combinations, and try them to see if they are explosive or otherwise dangerous, and sometimes he discovers in a very unpleasant way that his new product is loaded. Dulong, in 1811, discovered chloride of nitrogen, and when he recovered consciousness amid the wreck of all the glassware in his laboratory, he made a note, with his unswerving hand, of the fact that chloride of nitrogen is highly explosive.

About a year afterwards, in trying to ascertain the exact conditions necessary to explode the compound, he lost an eye and two fingers. Davy, in the same year had a similar adventure with the new explosive. A tube containing a small quantity was suddenly shattered to atoms without any apparent cause, and a piece of the glass struck Davy in the corner of the right eye, disabling him from further immediate experiments. In July, 1813, Davy set about finding out what was the matter with chloride of nitrogen, and attempted an analysis by mercury. The stuff went off again as usual, but Davy had protected his eyes with a thick plate of glass, and he was wounded only in the head and hands. Faraday was an assistant to Davy at this time. He was holding a small tube containing a few grains of the chloride between his thumb and finger, when a sudden and wholly unprovoked explosion occurred, stunning him and badly tearing his hand.

Play the elder lost his life by venturing near Vesuvius to investigate the interesting phenomena of the eruption of August, A. D. 79. He was suffocated by the sulphurous fumes. Lehman, professor of chemistry at the Imperial Museum of St. Petersburg, was killed in 1767 by inhalation of fumes from a strongly-heated arsenical mixture. Berthollet proposed in 1788 to substitute the chloride of potassium for the nitrate in the manufacture of gunpowder, and while experimenting at Essonne produced a terrible explosion that killed the director of the Government works and a young lady, Berthollet and Lavoisier were both present, but escaped injury. Lavoisier was guillotined in 1794. Pelletier the elder made a special study of combining phosphorus and chlorine with the metals, and the breathing of the vapors induced consumption, of which he died. In 1868 Barraud rubbed fulminating mercury in an agate mortar and had a portion of his hand blown off. The next year Figuer put 60 grains of the same stuff in a glass-stoppered bottle and took it to the lecture room at Montpellier. When he removed the stopper, the friction caused an explosion that destroyed one of the chemist's eyes. Thenard was lecturing in 1835 to the chemistry class of the Polytechnic School in Paris, and moistened his throat with two mouthfuls of corrosive sublimate instead of sweetened water. "Gentlemen," he said, "I have poisoned myself; what I have taken is corrosive sublimate, and the remedy is white of eggs. Bring me some eggs." The students raised all the stores and kitchens in the neighborhood, and the professor was supplied with eggs enough to save his life.

Take It This Month.
Spring rapidly approaches, and it is important that every one should be prepared for the depressing effects of the changing season. This is the time to purify the blood and strengthen the system, by taking Hood's Sarsaparilla, which stands unequalled as a spring medicine, and has endorsements of a character seldom given any proprietary medicine. A book containing statements of the many wonderful cures it has accomplished, will be sent upon application to C. I. Hood & Co., Apothecaries, Lowell, Mass. 100 Doses One Dollar.

Charley Hattewater—Do you notice how repulsive my voice is? Mrs. C. H.—That is quite natural, my dear; it comes from the place of departed spirits, you know.

JEWEL THAT JOHN FOUND.

It was about five minutes after the second and last whistle had blown at Dart's shoe factory when Annie Veiga came running up the street, panting and red of face. John Dart, standing on the steps talking with two strangers, smiled as she came up and said in slightly surprised tones:
"You are late this morning, Miss Veiga—something never before known?"

"Yes, sir. I am sorry, but I overslept myself."

"Up late last night—had a beau, perhaps?" suggested John, roughly.

"No, sir," retorted Annie, promptly and rather snappishly, for even though he was the nephew of William Dart, the great shoe man, and the prospective heir to all his wealth, she considered he was taking a liberty, especially before strangers. Perhaps pretty and prim little Annie had some other reason, too, for resenting his remark.

"Pretty girl," said one of the strangers after she had passed.

"Yes," assented John, "and about the neatest, quickest girl ever in the workroom," and then the stranger began talking again very earnestly, as before Annie came up the steps.

"Well," said John, "of course you may satisfy yourself, but I can tell you beforehand there is not one of our girls whom we do not trust. It will take you about all day, for they live in all directions from here, if you have to search their rooms. As uncle says I must go with you in that case, the sooner it is over the better for me." Then they all three went up-stairs to the girls' workroom.

"Will these who stopped at Dingus' jewelry store last night, on the way home from work, please stand up?" said John. Over half of them stood up, while John took down their names and the numbers of their rooms and the detectives watched each face keenly. So far no one was disturbed by a guilty conscience. After ascertaining beyond a doubt that all who had been in the store reported, John announced:

"We have received word that a valuable amount of jewelry was stolen from this firm last night at about the hour you were there, therefore suspicion has fallen upon you, and each girl must allow her room to be searched if the goods are not previously found upon her person."

So the search began. A quiet, trusty girl, much older than the others, and who had not been with them the evening before, was appointed to conduct the personal investigation in another room. One after another left workroom to return in a few minutes declared innocent, until the officers were satisfied none of the goods were at the factory.

"Now," said John, when the last girl had returned, "will each one of you give me your keys in turn, for I must accompany this officer in his search while the other remains here."

"Not this morning," spoke up Annie Veiga, quickly, while the smart detective felt the jewels in his grasp, so to speak, and the reward in his pocket. John looked surprised—some said he turned a trifle pale as he looked into Annie's flushed, guilty face.

"Yes, of course, this morning," he answered gravely. "What difference is it, Miss Annie?"

"None," answered Annie, hastily; but as John took her key the detective, thinking it best to search her room at once instead of in her turn, she burst out crying and seemed so broken down the remaining officer felt justified in placing her under arrest.

John had visited Annie's room before, just once, not many evenings before. He had taken her a book to read and a small basket of fruit, thinking that as neat a way to begin his courtship as any. He had thought as he left that evening it was the prettiest, brightest little room he had ever seen, far exceeding any in his uncle's grand mansion. He had little thought the next time he climbed the stairs to room No. 33 would be upon such a painful errand. He could not believe sweet little Annie guilty until it was proved, yet he climbed the stairs unwillingly, and with more unwilling fingers turned in the lock the key Annie had surrendered. When the door was open he stood for a moment irresolute. The room seemed the same, yet not the same either. Where, the evening he had called, a pretty Japanese screen had stood, was now a rather shabby though scrupulously clean little stove, and thereon a skillet with a few potatoes left from the morning's meal; and a dainty bed, with covers thrown back and pillows airing, was drawn out where he had stood a small book cabinet he had particularly noticed. John reassured himself he was in the right door by several little articles on the walls, and while the busy detective was diving around in Annie's one trunk and the bureau drawer in search of the lost treasure John was looking for the lost jewelry. He was looking around at this little jewel of a room, a fairy's paradise as it seemed to him. Across the foot of the bed was a dainty nightgown, to be sure, made of cheap muslin and trimmed in crepe lace, but John did not know the difference between it and one of linen trimmed in finest thread. Two small slippers were set precisely under the bed and over a stool by their side was a pair of red stockings, turned wrong side out as though to air. Indeed, I am telling the truth when I tell it, that while the detective's hand was turned searching Annie's small book cabinet John quickly stuffed that pair of red stockings in his coat-pocket. Why he did so he could never satisfactorily explain. Then, as he sat there on the bed looking around upon the tidy disorder, it came across him what was the reason of Annie's confusion and distress, for, as fate would have it, he generally believed to be, he could easily imagine that no little woman as neat as Annie could endure to have her castle caught in such confusion. Perhaps had it been the detective alone she would not have cared; and then John smiled complacently to himself. It was her neat-fitting dress and dainty linen collars and always spotless white aprons that had at first attracted John's attention; and then it was the pretty face, with its pleasant smile and independent eyes, that had increased the interest until it had culminated in his meanly pocketing her red stockings.

At last the detective gave up in despair. "She has hid them some place else," he said shortly.
"She never had them at all," replied John, calmly.
"Then what made her act so guilty?"

questioned the other, almost believing himself in her innocence.

"Don't know," answered John laconically. When they returned to the factory there was quite a confusion and hubbub, for the jewels had been found by another detective employed by Dingus in the possession of a notorious pickpocket, who, disguised as a woman, had slipped into the store with the crowd of factory-girls.

Everybody was glad, and congratulated Annie—even the smart detective did, although he could not help wishing she had been so considerate as to assist him to gain that reward. But Annie could not look at John straight in the face. Poor child! What feelings would have been hers had she known the enormous bulge in John's jacket pocket was caused by her very identical red stockings laid out to air that morning? John, of whom she never dreamed as other than "Mr. Dart," even though she worked faster when he came her way, and perhaps felt more anxiously about the smooth masses of light brown hair than at any other time?

Well, when the two officers had gone, and all had settled to work again, John came to Annie's chair and said kindly:
"Miss Annie, that detective turned everything in your room in such awful confusion it will take you all day to straighten it up again, so, if you like, I have gotten permission for you to take the remainder of the day, and no reduction to be made."

"Thank you—you are very kind," she murmured, but she would not look at him and seemed so confused that big, good-natured John turned away in pure kindness and let her make her escape unnoticed.

Annie fled homeward, dashed into No. 33, glanced wildly over the room, then burst into tears.

"O dear! O dear!" she sobbed. "There was my nightgown on the bed, and my slippers, and my bed not up—and, O! potatoes in the skillet! Oh, he will think I am a regular sloven! Why couldn't it happen any other time than when I had to sleep so late I couldn't even eat my breakfast! O, dear, he will never like me again! He couldn't after seeing such a looking room."

She did not stop to think that her castle looked worse when they had left than when they entered. But as the disorder worried her so much she could not sit still and cry, she began her task. It was sometime before the detective's work was undone—everything in trim order, with the mattress rolled up and the bed folded against the wall like a book cabinet and the few dishes washed, and the tiny stove blacked and the screen set around it, and the one table covered with a gayly embroidered cloth, all of which transformed the kitchen and bedroom into a cozy little sitting room as though by a fairy's wand. It was a dainty little place, nothing expensive, but exquisite in the taste and tact displayed. The prevailing colors were deep red and pale blue and gold, with many neutral tints blended in the various bits of fancy work. On a bracket was a bit of white statuary set on a delicate matting of the tender green leaves of a growing vine—the only costly extravagance in the room, and Annie well knew how long it took to save enough to buy it. She had selected her room for the south window, and therein were standing two geranium plants in full bloom—one a deep double red, the other a soft single white flower.

As Annie was viewing these little luxuries with commendable pride and gradually plucking up spirits, she suddenly bethought her of her stockings. She did not remember of picking them up, and as she only had three pairs, it was important that none of them should be misplaced. Therefore she began to search diligently, and was beginning to get tired and puzzled in the useless search, when a loud rap, which she had heard once before at the door, caused her to glance hastily in the glass and then timidly open the door to the knock. It was a noon. The whistle had blown just a few minutes before, and instead of going to his dinner, here was Mr. John Dart standing at her door.

"Won't you come in?" asked Annie with a downcast face.
"That's what I came for," responded John, honestly, and in he walked. Then he turned around, and taking her hands in his own in the time honored and approved fashion, he said:

"I have been thinking of you this long while, Annie, and now I feel I cannot wait any longer. You are alone in this world and I am almost so, although uncle is very good. Let us make each other happy, and have a pretty home like this with"—glancing around the room—"with posies in every window."

O, of course, Annie said "Yes!"—who wouldn't? And when the quarter to 11 whistle blew John (who was very punctual) went from room 33 to the factory as one walking on air—mayhap his empty stomach had something to do with the lighthearted feeling, but he never thought of that, of course. Annie sat and laughed and cried to think how happy she was, and spent the remainder of her holiday until evening building air-castles until John came back and began to put solid foundations to the same by means of his pocketbook.

They were married two months afterward, and the next day John gave his wife a small bundle rolled up in white paper and tied with blue ribbon. Full of wonder Mrs. John untied the ribbon and beheld—her lost red stockings!

"Why, John!" she exclaimed, instinctively running her hand down to the toe. But there were no holes—only two or three dainty little darns, and it is safe to predict that John's socks will never suffer.—*Chicago Tribune*.

Early Avarice.

The newspapers frequently contain accounts of old men and women who live in want while they are hoarding large sums of money. Avarice is a repulsive vice in the aged, but in the young it is against nature. Yet, if it is once planted in a child's character, it grows with incredible rapidity and strength.
A young woman, the last scion of a respectable family, lived in one of our inland towns, supporting herself by sewing. She occupied one bare chamber, in such poverty as to perplex her friends, who knew that she had twice inherited large legacies. She became ill with an agonizing disease, brought on, the physician said, by lack of sufficient food, and grew weaker day by day, until she could not leave her bed.

Her physician, knowing that she had money hidden away, spoke frankly to her at last, telling her that her life depended on her taking tonics and rich, nourishing food, which her poor neighbors could not buy. "If you do not take this food you will not live a week," he said.
The girl remained thoughtful and quiet when he was gone. After a few hours she bade her nurses bring a chest which was in the room near to her bed so that she could reach it. The key she kept under her pillow. As one day after another passed, she would occasionally finger the key and look wistfully at the chest; but she did not open it.
On the sixth day she died. In the last struggle with death she held out the key, motioning to her nurse to open the chest. But it was too late. During all those days she had weighed her gold against her life. The money was the dearer of the two. Though she knew she could not carry it with her, she could not bring herself to spend a dollar of it.
A still more horrible example of the effect of avarice was reported in the French journals this winter. An old woman, living with her children, had possession of a sum less than a hundred dollars. To force her to give it up, they literally burned her alive.
We all shudder at a passion which can so brutalize human beings. Yet how many men are moved by it under some other name. Here is a wealthy woman who fills every closet in her house with costly china, at which she never looks; or a man who buys vast tracts of land which he neither cultivates nor sells.

The sole use of either money or goods in this world is to make some living being wiser or happier. The man who hoards this purpose, to gratify his love of hoarding, is a miser, though he may give himself some more honorable title.
The German Frontier.
It is curious to note that the frontier of Germany and France is more distinctly marked than that of any other two countries. The frontier line is so arranged that it crosses every road at right angles. On the German side is a large post twelve feet high, painted like a barber's pole—red, black and white—with a cross piece on top with the word in black letters on white ground "Grenze!" Diagonally opposite is a cast iron post twelve feet high painted grey. On an iron cross piece is the word "frontiere." These posts are only placed on the roads and railway lines. The frontier is indicated "across the country" by stone blocks projecting about a foot above the ground at intervals of fifty yards. On the French side is cut with a chisel the letter "F," and on the German side is the letter "D"—for Deutschland.

Cow Boys of Some Use.

James Hogan, the Sheriff of the Rio Grande, a full-fledged cowboy, a bucking broncho breaker, and an expert lasso singer, came to Atlanta several days ago with a lot of untamed ponies. Yesterday morning Hogan saddled an unbroken broncho and started out for a ride. The pony bucked, but Hogan was at home in the saddle, and in the course of an hour or two found himself near the East Tennessee shops, astride a well-broken horse. He then started back to the city by Windsor Street. Just as he rode out of Windsor Street two fine gray horses, drawing a close carriage, dashed by at break-neck speed. There was no driver on the box, and lines were dangling around the running horses' heads. As they went by a lady thrust her head out the window and called for help. Hogan's chivalry was aroused, and turning his broncho's head toward the flying carriage he drove his heels into the pony's side and dashed after the runaway, and as he ran Hogan wound his lasso, which was on the horn of his saddle. His pony was fleet of foot, and in a short race overtook the carriage. As he came along side the team the cowboy circled his lasso around the head a time or two and then let it go. The colt flew out and settled down around one of the carriage horse's heads. Hogan drew in his pony, and with a sudden jerk the taut rope stopped the team in its mad flight. By the time the team was stopped Hogan was on the ground and had the horses by the mouth. He had no trouble in quieting them, and in a few minutes the driver came up, to whom he surrendered the team.—*Texas Stockman*.

Our Daily Bread.

Heavy and sour bread or biscuit has a vast influence through the digestive organs upon the measure of health we enjoy. How important to our present happiness and future usefulness the blessing of good health and a

A SOLDIER.

He sat by his side, a manly form.
A soldier in a blue uniform.
With heart that is generous, free and warm.
A spirit bold and true.

"I think it's silly," she said, "to be a soldier in name."
Of course, in a battle—she tossed her head
"You might win a little fame."
"I'm sure you soldiers are awfully proud
When out on a street parade,
You look so handsomely at the crowd,
That cheer as though they were paid."

"You never have marched at front or rear
Tossing out of numbers' rattle;
A soldier's long march rang sweet and clear,
And never have seen a battle."

"I'd like to watch you in a fight;
You'd run," with glance demure
At him from "neath her lashes bright,
I mean to the front to be sure."

"Tis true, I never have been to war,
Although I'm a soldier," he said;
And never heard its tumult, nor
Dodged at a bullet of lead."

"I know I never would make a stir
In battle as he in blue,
But, if you're willing, I much prefer
My first engagement with you."

HER GALLANT CAVALIER.

"I think him the very embodiment
Of chivalry and gallantry," said Ethel Hunt,
enthusiastically.

She was a dark-cheeked, diamond-eyed
girl of eighteen, with braids of blue-black
hair coiled around the back of her small,
Greek-shaped head, and a color as rich and
velvety as the side of a July peach.

"Humph!" said Aunt Sara. "I've heard
girls talk so before. And it generally ends
in one thing."

"For shame! Aunt Sara," cried Ethel,
coloring up to her eye-lashes. "I only mean,
of course, that it is a very agreeable
companion."

Now this Aunt Sara of our little Ethel was
no particularly stately of an uncertain age,
nor portly, pillow-shaped widow, with the
photograph of her dear departed husband
worn, lock-shaped, upon her bosom—but a
pretty young woman of four or five-and-
twenty, with bright blue eyes and hair all
streaked with golden gleams, who was en-
gaged in the congenial occupation of mak-
ing up her wedding clothes.

"An agreeable companion—of course,"
said Aunt Sara. "Look, Ethel, do you think
white Maltese lace or French blonde,
with a heading of Roman pearls, would be
prettiest for this *bride*?"

Aunt Sara knew when to drop a subject
and when to hold on to it! But while Ethel
was stitching the quilling of French blonde
on to the white silk dress her young aunt's
mind was busy upon the topic she had ap-
parently abandoned.

"The disagreeable fellow," thought Aunt
Sara. "He has somehow heard that Ethel
has money, and he is determined to win it.
If she could only see him in his true light;
but I know what a perverse thing a wo-
man's heart is. Just as sure as I attempted
tell her what he really is, she'll make up her
mind that he is the finest and least appre-
ciated personage on the face of the earth.
And I did so want her to keep her heart
whole until Eversd Grafton comes to be
Charles' groomsmen! Eversd Grafton is
worthy of a princess!"

And Miss Sara Martell sat and sewed
away in absorbed silence, without speaking
a word for the unprecedented period of five-
teen minutes.

"They say he is perfectly intolerable
at home," she said to herself. "Clara Waters
was there once and heard him rating his
sisters fearfully because the breakfast for
his late breakfast was a little overdue. If
only I could manage it that Ethel should see
him in his true light!"

She sat and thought a while longer—and
suddenly the color bloomed into her cheek,
the dimples into her chin. She started up.

"Ethel," she said, "I'm sure you must
be tired of sitting over that everlasting
stitching. I've got to go over to Susy Morand's
to borrow a pattern; it will be just a
pleasant walk for us."

"To Miss Morand's?" Ethel was vexed
with herself, but she could not help the tell-
tale blood that surged into her cheeks.
"Isn't it rather early? Only nine o'clock!"
"Early? Not a bit! Susy and I are so
intimate, we don't mind car papers and
calico wrappers. Get your hat and come
along, quick!"

But, in spite of her exhortations to speed,
Sara Martell smiled to herself to perceive
that Ethel Hunt lingered long enough in her
own room to change her black lace breast-
rings for a becoming little butterfly bow
of rose-colored ribbon, and to rearrange the
dainty tendrils of silky black hair that
drooped so caressingly over her low, broad
forehead.

"She thinks we shall see Julian Morand,"
she thought to herself. "Well, perhaps we
shall. I am putting myself entirely into the
hands of luck and chance."

But when they reached the Morand man-
sion, instead of ringing formally at the front
door, Miss Martell went around to the back
porch, a pretty little entrance, all shaded
with honeysuckles and trumpet vines.

"I always go in here," said she, non-
chalantly, in reply to Ethel's remonstrating
glance. "Susy Morand and I are just like
sisters."

"Susy Morand," a blooming girl of 18,
was in the kitchen, making apple pies.

"The pattern? Of course you shall have
it," she cried. "Just wait a minute, until
I get it."

"I'll go with you," said Sara. "Ethel,
you'll not mind waiting for us here?"

"Not in the least," said Ethel. And she
sat down by the window, where, trained
in bottles of water, were creeping like
green jewels across the crystal panes of
glass.

"Sue Sue!" She started at the voice of
her *preux chevalier* of the evening before
coming roaring down the back stairs. "Con-
found you all, down there, why aren't my
boots blacked? Sue! Mother! Nell! what's
become of my breakfast? You must think a
man has nothing to do but to lie here and
wait all day for you lazy folks to stir
around!"

There was no reply as he paused, ap-
parently expecting one. "Mother" was down
in the garden under a big green sun-bonnet,
gathering scarlet cheeked tomatoes for din-
ner. "Nell" was in the front yard picking
red-veined autumn leaves out of the gold

and russet drifts that lay like treasures of
precious stores upon the grass.

Sue was shut up among the mysteries of
"patterns." Innumerable, with Miss Sara
Martell. Ethel Hunt sat coloring and half
frightened, the sole audress of Mr. Morand's
objurgations.

"I know there's some one down there!"
he shouted. "I can hear you breathe and
your dress rustle. Just like your ugliness
not to answer a fellow! Do you hear, Sue?
Black my boots, quick! I'm waiting for
them!"

"Bang! bang!" came the useful articles
of wear in question down the winding
stairway that led into the kitchen.

Poor little Ethel! She half rose up, then
sat down again, piteously undecided what to
do—and even while she hesitated, with color
varying like the red and white of the Ameri-
can flag in a high wind, the door at the foot
of the stairs flew open and in stalked Mr.
Julian Morand, tall and disheveled, with
unkempt hair and beard, fretfully curved
mouth and a most unbecoming costume of
a soiled Turkish dressing gown, faded
pear-colored necktie and stockings—
feet thrust into dirty red morocco slip-
pers.

"I say, you!" he snarled out; "why don't
you—"

And then, perceiving to whom he was ac-
tually addressing himself, he started back,
turning fiery red.

"Miss Hunt!"

And, with a downward glance at his tol-
lette, he fairly turned and fled, the skirts of
his Turkish dressing-gown floating like red
and orange meteors behind him. And, morti-
fied and terrified though she was, Ethel
Hunt could not resist the temptation to
break into a peal of hearty laughter.

This, then, was her ideal among men, her
gallant cavalier, her "Sir Laurence" of
fancied perfection, snarling at his mother
and sisters like an ill-conditioned bear,
flinging old boots down the stairs at them,
tumbling out of bed at nine o'clock in the
morning, while his mother split kindlings
and picked tomatoes out in the vegetable
garden! Like some Chinese idol, so fell Mr.
Julian Morand off his high pedestal in the
estimation of Miss Ethel Hunt.

She told it all to Sara Martell when they
were safe at home.

"Aunt Sara," said she, "I am thor-
oughly disenchanted!"

Miss Martell shrugged her shoulders and
mentally thanked her lucky stars.

"I could have told you so much before,"
said she. "These Adonises are like cheap
calico—they will neither wear nor wear!
Wait until Eversd Grafton comes!"

"And who is Eversd Grafton?"

"The nicest young fellow in the world—
after my betrothed husband."

When Mr. Grafton came he so far just-
ified Aunt Sara's encomiums that Ethel re-
ally did like him. And Aunt Sara was willing
to leave the rest to fate.—N. Y. News.

Stealing His Rival's Sermon.

Ephraim Ben Gamaliel and Menasseh Ben
Israhel were two Israelites on their way to
present themselves as candidates for the ex-
alted post of rabbi of the town of Berdit-
chov, unknown to each other. The same set
of curious chances which brought them to-
gether at the same kretsch or inn also al-
located them two rooms adjoining each other
and only divided by a thin wooden parti-
tion.

Night came. All the inmates of the inn
retired to rest. Not so, however, with Me-
nasseh. As soon as everything was quiet he
lit his candle and commenced rehearsing his
specimen sermon. Our other friend Ephraim
was soon awakened by the sound of his
voice, and in a few moments grasped the
situation—namely, that the other was a rival.

He listened, and found to his chagrin that
the other's sermon was far superior to his
own. This was very unpleasant and he
meditated deeply on what he should do.

At last he hit upon a plan.

He very silently got up, lit his candle,
took pen, ink and paper, seated himself and
wrote down his rival's words verbatim as he
uttered them. When he had completed this
task he silently returned to his couch.

No sooner had the day dawned than he
was up and off on his journey to Berdit-
chov, arriving there several hours before
Menasseh-Sabbath came. The synagogue
was crammed with a critical audience,
among them all the learned men of the
town, for there was not going to be a grand
display of Talmudical knowledge and wise
sayings?

First came, first served. Ephraim had
presented himself first, and was entitled to
the first chance. He mounted the pulpit
and gave forth a discourse—the one he had
copied from Menasseh. This was his little
plan. He thought, certainly, that his rival,
deprived of his prepared sermon, and not
having another to replace it, would leave
the field to him.

He was, however, mistaken. Menasseh
was certainly surprised at first to hear his
own composition repeated by another, but he
determined to outwit the other.

Accordingly, when his turn came he calm-
ly occupied the place just left by Ephraim
and in a clear voice repeated the sermon
just delivered—word for word—which was a
very easy matter for him, it being his own.
The congregation was dumfounded. A
man to repeat a long sermon, word for word,
at a moment's notice—marvelous.

A rabbi with such a prodigious memory
must indeed be a genius.

"Now, brethren," said he, "you have
seen one part of my talent. I will now
preach to you."

But the audience would not hear any
more. They had had enough proof to con-
vince them that he was fit for the post and
elected him on the spot unanimously, much
to the discomfiture of the other.

A Sorry Plight.

The Dog Jim Rang the Bell.

The farmers in the vicinity of Paluski,
Pa., hang loud-sounding bells on high posts
near their houses, to be used as danger sig-
nals, to summon aid in case of fire on the
premises, or to give other signals to their
neighbors. J. H. Davidson, a farmer living
near here, has a big bell on a twelve-
foot post. He also has a shepherd dog
named Jim. Jim is forced to sleep out of
doors, and in cold weather he does not
relish it. A rope hangs down from David-
son's bell, so that it can be easily reached.
Friday night was a very cold one, and also
a very bright one. Somewhere about mid-

night Davidson was awakened by the ring-
ing of his big bell. He jumped out of bed
and ran down to the kitchen door and
opened it to look out and see what the mat-
ter was. The bell, post and rope were
plainly visible, but nothing else could be
seen near them. Jim, the dog, came into
the kitchen when the door was opened, and
laid down by the stove.

Farmer Davidson was puzzled. He was
sure that the dog would have made an out-
cry if any one had come on the grounds.
The ringing of the bell was a mystery.
Davidson made the dog go outdoors and
then went back to bed. He had just got
nearly tucked in under the covers when the
sound of the bell, ringing three times loudly
and unmistakably, was heard again. Da-
vidson sprang out of bed and hurried down-
stairs again. "No one was to be seen. The
dog came again in the house and lay down
by the stove."

If others in the house hadn't heard the
bell the farmer would have thought he must
be mistaken. No one in the house is super-
stitious, but this mysterious ringing of the
bell by unseen hands made them all feel un-
comfortable. The family sat up for an hour
watching out of windows, but no one came
to ring the bell. The dog was turned out
doors again and the family went back to
bed. Quiet had barely been restored in the
house when the sharp clang of the bell rang
out once more. There was a general start-
le of the family down stairs again. This
time alarm and uneasiness were depicted on
every face. Farmer Davidson dressed him-
self, went out and made a thorough search
of the premises, and returned as much mysti-
fied and more disturbed than before. The
dog Jim went back in the house with him.

It was agreed that no human being could
be responsible for the ringing of the bell,
for if it were the case the dog would have
barked. Jim was driven from the house
again, and the family went back up-
stairs, but not to bed. They sat by the win-
dows and looked out upon the bell-post
with unquestionable awe. As they looked
they saw the dog Jim trot deliberately from
the house to the bell-post. He raised up on
his hind feet, seized the bell-rope in his
teeth, and gave it three or four vigorous
jerks. The bell rang and the mystery was
solved. Jim had made up his mind that he
wanted to sleep in the house that cold night.
He was let in at once, and the family went
to sleep.

A Feeble Rebellion Subdued in Very Short Order.

Jim Akers was a small, tow-headed,
knock-kneed man, with irregular teeth,
which made his mouth look like a steel-trap
twisted out of plumb. His wife was a large,
raw-boned woman fully a head taller and
fifty pounds heavier than Jim. She had the
temper of a half-famished wildcat, and no
darker joy "gettin' religion" was ever as
much afraid of the devil as Jim was of
her. He had reason to be. When she was
fairly on the warpath she breathed chain-
lightning and lung cyclones from the tip of
her tongue. Nor did she content herself
with words only, however bitter and furious.
She very often brushed the poor little wretch
with a hickory until he felt as if he had
borrowed his back of a saint fresh from the
gridiron.

One bright, golden, delicious afternoon
in the latter part of May Jim left the patch
where he had been at work all day and
"smuck" into his cabin by the back way.
He proceeded hastily to doff his every-day
clothes and don his Sunday garments, cast-
ing furtive glances all the while at the
black-browed, terrible dame sitting in the
front doorway knitting. With trembling
haste he completed his preparations, and
was shambling out again, when his wife,
previously apparently oblivious of his pres-
ence, shot a fierce glance at him which made
him jump almost out of his shoes and
brought the perspiration out from every
pore.

"What you boun' fur?" she asked.

"I loved I wuz gwine down the fish-fry
for an hour or two. Them boys is a
bevin'—"

"Well, you loved wrong. You jest
hiss off them close, and go back inter that
patch and finish heeln' them pertaters.
Don't you distress yerself 'bout no fish-
ries."

"But I done told the boys I wuz gwine to
be thar."

"Well, you tole 'em a lie."

"Well, Ed Sykes and Hank Evans is wait-
in' fur me now at the cross-roads, and I'd
rather not disappoint 'em."

"Well, I'd rather you would. Shut up
now, and go 'ere you're told!"

Jim gasped and quaked with fear; but,
for the first in many years, he thoroughly
realized the tyranny under which he was
crushed. His heart was set on going to the
fish-fry, and in that feeble, fluttering little
organ a faint shadow, a dim eidolon of
spirit, became suddenly aroused. He hesi-
tated a moment, ventured even to return
the gaze of those glowing, wrathful eyes,
and then started, saying:

"Well, I'm a gwine."

Great Jehosaphat! Houph-la!

She swooped on him like an owl on a
mouse. The air was filled and darkened
with dust, and sandy hair, and agonizing
sneezes.

Ed Sykes and Hank Evans, at the "cross-
roads," became convinced that Jim's ab-
sence had caught fire and that he was perishing
in the flames. They rushed in all haste to his
assistance, but as they neared the spot the
clatter subsided, and they heard a stern
feminine voice, which caused them to halt
and keep out of sight, say:

"Now, I reckon you'll do yer yote."

Then they recognized Jim's piping voice,
protesting between convulsive sobs:

"I'd sorter gin out gwine befo' you
spoke."

A Sorry Plight.

Miss Maria Parlos has a fund of stories of
the raps and mishaps that befall her in her
hurried rides from cooking class to cooking
class in her circle of culinary endeavor with-
in 100 miles radius of New York. In all
these perils by sea and land the satchel by
which she is invariably accompanied bears a
prominent part. The dough that "rose" in
it, the coffee that her hungry fellow passen-
gers smelled from it have been celebrated in
print, but its latest adventure remains un-
told, unsung.

The time was one morning last week; the
place the grand central station. The return-
ing Montreal revelers were disembarking,

tired, cross and critical. It was a great op-
portunity for the satchel. The satchel was
equal to the emergency. After running the
gauntlet of some scores of eyes which seem-
ed turned upon her with more than usual
curiosity, the owner of the bag was ap-
proaching her car when a group of train
hands called after her that "something had
broke loose." It was the doings of that un-
lucky satchel. The flood-gates of a bottle of
cream within it had been opened, and rivu-
les of the white fluid were dropping in cas-
cades over cloak and gown. No wonder the
carnival visitors gazed.

The train was starting. A good-natured
brakeman held out a hand to lift her to the
rear platform of the last car, and then, as
the engine pulled out of the depot, pots
of butter and jars of stock, with bunches of
herbs and boxes of soap, a grouse ready for
the larding needle, a fillet of beef, and only
the satchel knows what more beside, were
overhauled in its depths and removed from
their dangerous proximity before the dis-
comfited traveler ventured to claim a seat
among mortals dressed in their best who
did not smack of the kitchen.

VARITIES.

GREAT, BUT UNKNOWN—Notoriety, like
fame, is subject to unexpected rebuffs. The
man with whose name everybody is familiar
is likely to find of a sudden a cruel some-
body who has never heard of him. The late Fred
Archer, the famous jockey, who was so dis-
tinguished in his profession that noblemen
of Great Britain attended his funeral, having
been injured by a horse, called upon James
Paget for aid. The eminent surgeon bound
up his wound, and Archer then re-
quested information as to the length of time
it would require to heal.

"Oh," said Sir James, "I think you will be
all right in two or three weeks."

"But shall I be fit for the Derby?" said
Archer, to whom the races meant fame and
fortune.

"Yes, oh yes," was the reply, "I think
you may go to the Derby."

"No, you don't quite understand me, Sir
James," persisted the jockey; "I mean,
shall I be fit to ride?"

"Well, I don't know," was the answer.
"Better drive—better drive."

Archer, quite taken aback by this innocent
rejoinder, found himself forced to explain.

"I am afraid, Sir James, you scarcely re-
alize who I am."

"No," said the surgeon, politely, referring
to the patient's visiting-card. "I see I have
the honor of receiving Mr. Archer, but—"

"Well," said Archer, "I suppose I may
say that what you are in your profession, Sir
James, I am in mine."

After which imposing preamble, he ex-
plained who he was.

A LADY who has honored the editor by
chatting with him for an hour, told him
among other things some anecdotes of the
noble men who in the days of her grand-
mother still lingered, a forlorn and broken
remnant, in the upper valleys of the Kenne-
bec River. The feature of civilization to
which these half-tamed savages seem to have
taken most kindly was begging, and num-
bers of the requests which they proffered,
in wheedling tone and with suppliant man-
ner, to the white brothers who dwelt in undisputed
possession of the land once owned by the
dusky ancestors of the petitioners.

"One of the things which they begged for
worst," the lady said, "was for grandfather's
rifle. Especially did one old Indian plead:
'Remenote water, no quite water; eenemot
pumpkin, no quite pumpkin; berry much we
want him.'"

"But what did he mean?" the editor asked
stupidly.

"The lady laughed.

"If you were a darkey," she answered,
"you would soon guess."

"And then the hearer divined that the noble
savage hankered for watermelon."

CRITICS—I have no more right to have an
opinion of the way things are conducted at
Harvard than any other outsider, and I have
always spoken concerning it with more cir-
cumspection and with more discretion than a
gentleman, a graduate of Yale, receive a sharp
reproof from one of Boston's silver-haired
doctors of divinity, the young man had been
expressing his disapproval of Harvard with
far more fervor than discretion, when the
clergyman said to him quietly:

"Then why do you let the University go on?"

"Sir!" stammered the New Yorker, wholly
taken aback by this unexpected thrust.

"What have I to do with it, going on or not?"

"I bow your pardon," the reverend gentle-
man returned with elaborate courtesy, "but
you seemed to speak with the authority of
one having things in charge, and I thought if
you are as bad as you say they'd better be
stopped altogether."

THE young, fair-haired wife of a member of
the New York Stock Exchange left town the
other day for a short visit. She returned un-
expectedly, and found a letter addressed to her
husband awaiting his return from the street
late in the afternoon. It was signed
"Frank Smith," and said: "Now that the
old woman is gone, let's go to the theatre and
pepper the town later." Mr. Smith is a fre-
quenter of the Hotel Brunswick, and was a
chum of the lady's husband in his bachelor
days. The wife sent this note to Mr. Smith:
"The old woman has returned. Although I
have never met you, I have frequently heard
my husband speak of you. I shall be happy
to accept the invitation to the theatre for him
and myself." Mr. Smith, not at all discon-
certed, got tickets for the Fifth Avenue, and
now says that his only regret is that he re-
ferred to the bright young wife of his old
friend as "the old woman."

ABOUT ten o'clock last night a stranger
asked the clerk at the National Hotel if he
could see a certain distinguished Congress-
man who is a guest of the home.

"There he goes now," said the clerk.

"Where?" asked the stranger.

"That man going up-stairs with a pitcher
of foot-water in his hand."

"What's he going to do? Take a wash?"

"No; that's drinking water."

"Aw, come off," said the stranger, getting
red in the face. "You may think you can
guy me because I'm from the country, but
you can't do it. I've never seen the man
before, but I know him a durn sight better
than that."—Washington Critic.

SAYS Frederick Locke: My friend Admiral

E. E., shortly after his return from a cruise,
—, who said after the usual salutations
had passed: "Tell me, Admiral, that
you had got married?" The Admiral, hop-
ing for a compliment, replied: "Why, Balie, I'm
getting on; I'm not so young as I was, you see,
and none of the girls will have me." On
which the Balie, with perfect good faith and
simplicity, replied: "Deed, Admiral, I was
an evenin' 'ere to a lassie, but there's a won-

ne, respectit, half-worn wumman wud be
glad to take ye."

All men are prophets save in their own
country, and M. Molesonier, the great French
artist, is no exception to the rule. Once
when his little granddaughter had received a
beautiful white satin fan, he offered to paint
a little picture on it. The ten-year-old maiden
was highly indignant. "I am inclined to
think you won't do any such thing, grandpa,"
she exclaimed. "I don't want my nice fan
dirtyed with your old paints." "Thus,"
said the great artist, "the child scorned what
an empress would have prized. Which is
right, I wonder—the child or the empress?"

War do we always talk of putting on a coat
and vest? Who puts on a coat before the
vest? We also say shoes and stockings.
What's the matter with us, anyhow? We also
put up signs telling people to wipe their feet,
when we mean their boots or shoes. And a
father tells his boy he will warm his jacket,
when he means to warm the youngster's pan-
talons. We are a little eccentric in some
things.

Chaff.

The most attractive thing about a toboggan
is a pretty girl.

A chilly operation is kissing a lady on her
snowy brow.

What is the hardest task in the world? To
think—Whittier.

The buzz-saw has an off-hand way with new
acquaintances.

How much older is a "ripe old age" than a
"green old age?"

A rousing demonstration—Getting a grow-
ing boy out of bed.

Speech is the golden harvest following the
flowering of thought.

There is no place like home, especially if it
is the home of your best girl.

Purposes, like eggs, unless they be hatched
into actions, will turn into rottenness.

The cowboy poet recently discovered in
Wyoming is to be called the poet laureate.

Since an old joke is called a chestnut why
shouldn't an old heart be called a walnut?

Why is a chicken pie like a grunnamit
shop?—Because it contains fowl in pieces.

If every man was as big as he feels there
wouldn't be standing room in this country.

The great road of human welfare lies
along the old highway of steadfast well-
doing.

There's nothing new under the sun, except
the ladies' hats, and they're very far un-
der it.

It is odd that the wages of sin remain just
the same as they were when the hours were
shorter.

A woman will call her new bonnet a
"duck," but never thinks it can bear the
least wetting.

The thermometer would be more popular
if it pulled down the price of coal as well as
the mercury.

It is said that a man cannot serve two
masters, but then most any "beer-slinger"
can serve schooners.

"So live that when thy summons comes to
attend the court thou wilt go as a witness and
not as a defendant."

An exchange asked: "Does politics pay?"
No, sir; but candidates must. If you doubt
this, enter the field and try.

"The world wares are very trying," said a
man to his wife the other morning when she
raided him for not building the fire.

Hot-house cucumbers are almost ready for
market, and the doctors are getting out the
old family remedies and dusting them off.

A new poem by an Eastern poetess bears
the title: "Want a Wing." What does the
gifted damsel want? Both drumsticks and
the glass!

A letter addressed to a "party in Father,
Mich.," was sent to a postoffice expert, and
he forwarded it to Paw Paw, Mich. He
guessed right.

We heard last fall of a woman who was pit-
ting cherries when her little daughter came
up and said: "O, mamma, let me help un-
button those cherries, can't I?"

"Papa," said the son of a saloon-keeper,
"what does 'jumping at a conclusion' mean?"
"Grabbing the last piece of lunch on the
bar," was the quick reply.

Lady to servant: Have you a recommenda-
tion from your last place? Servant to lady:
Yes, but I'll not show it, yet I'll see the one
you have from your last girl.

"Did you ever hear the 'The Maiden's
Prayer'?" asked a traveling man of an old
merchandise who had five daughters. "Did I
ever? You bet I have, with all the variations,
from matinee tickets to seal-skin saucers."

FRANK CHICAGO MISS—This paper states that
strenuous efforts are being made to raise a
fund for Walt Whitman. Second Chicago
Miss—"Why, is he poor?" "In actual want,
it seems." "Mercy me! I hope he won't
have to close his shoe-leather factory."

It was raining heavily when Parson Sur-
pluss Eol, in crossing the streets met a poorly-
clad boy whose clothes were soaked. "My
dear little boy," why don't you get an um-
brella?" said the kind-hearted clergyman.
"Since pa has quit going to church he never
brings home any more umbrellas."

Rubenstein, when in Leipzig, was one day
visited by a very pretty girl, who asked per-
mission to play for him. After her some-
what doubtful performance she rose and asked
the great master, who was smiling ironi-
cally: "What shall I do?" "Get married,"
was Rubenstein's laconic answer, given in a
tone of conviction.

NEW ADVERTISEMENTS.

It cannot be asserted that
every case of Consumption
may be cured by this medi-
cine, but it is true that thou-
sands of lives will be saved if
they do not delay too long.

By druggists, 25c.

DR. PARDEE'S
REMEDY,
(The Only Reliable Blood Purifier.)
A SPECIFIC FOR
RHEUMATISM,
Scrofula, Salt Rheum,
Neuralgia, Ring Worm
And all other Skin and Blood Diseases.
25 CENTS PER BOTTLE.
LIVER AND KIDNEYS.
Cure Indigestion and all diseases arising from
an enfeebled condition of the system.
Ask your Druggist for DR. PARDEE'S REMEDY,
25c. and take no other. Price \$1.00 per bottle or six
bottles for \$5.00. Manufactured by
PARDEE MEDICINE CO.,
Rochester, N. Y.

ROCHESTER, N. Y.
GENTS—For the past winter I have been
very badly afflicted with rheumatism. About
six weeks ago was confined to my bed, and
when I was able to get around, I was ob-
liged to use crutches. All the time I had the
best medical attendance.

After one week's use of Dr. Pardee's Rem-
edy I was able to walk with a cane. I contin-
ued its use and can now move around without
assistance of any kind, and an better in
health than I have been for years. It has
effected a permanent cure and I take pleasure
in recommending it.
C. H. FINNegan,
Superintendent, City Building,
Front St.
Send for pamphlet to Pardee Medicine Co.

NEW ADVERTISEMENTS.

BABY'S
SKIN & SCALP
CLEANSED
PURIFIED
AND BEAUTIFIED
BY
CUTIC

(Continued from First Page.)

It so. We should try to understand the nature of our children, and discover what they are thinking about. Their thoughts are often above the things under their feet. You cannot make a tiny boy the pattern for all others to follow, and make them all conform to him and follow his example in those things. We are born with different abilities and natures, and need different influences to make us what we should be.

Mrs. H. Randolph said it was a very rare exception to find a household where all the circle of her friends, but making a home is entirely a different thing. There is something in the manner of speaking, to make the children respect your wishes. It is a very dreadful thing to be in some houses, she pitied children who were brought up under such influences. Never speak threateningly, nor in harsh tones; speak to the family as you would speak to a neighbor if one should drop in. Save the kindest tones for home use. It is hard to believe that all are home pure alike. Only one in all the millions before us was perfect. There must have been some excellent teaching to make so many good people as we find everywhere.

Mrs. N. H. Bangs—Cheerfulness will make sunshine, and many gulfs can be bridged over by it.

Mr. H. Randolph hoped we all would find something in the discussions that would help us. We never learn too well the lesson that makes us better homekeepers and better citizens.

At the close of the discussion, Mrs. E. P. Mills recited one of Carleton's Pioneer Ballads, after which D. Woodman read a paper upon "Building Monuments." He said men were afflicted with a mania for building monuments to perpetuate their names and deeds. The Pyramids have outlived the history of the builders. But few of us will live in the memory of the future. Monuments of good works will endure. He cited some of the monuments of folly which have failed, and others which are building that lack a good foundation. In the discussion following the paper, Mr. N. H. Bangs said we add something to our monuments every day, either good or ill. While we may not build monuments so lasting as those of antiquity, we may be remembered for what we have done.

Mrs. Randolph—We build whether we will or no. Mr. Gough said to a friend that he did not care to endow a college, or to found a hospital. He only cared to be remembered as a friend of the unfortunate. We not only build ourselves, but we help others build by our influence. We should be careful that the material we furnish should be good.

E. B. Welch said when he was a boy nothing looked so grand as a locomotive. He remembered some of their names, and learned to distinguish them by the tone of the whistle. He remembered a new one with the name "Daniel Webster" beneath the name the sentence: "I still live." He made inquiries about this name, and learned of the greatness of the individual. The words "I still live," had been an inspiration to him through life.

The discussion was very general, and many excellent sentiments were expressed, but space forbids a further recitation. The June meeting will be held at the house of E. B. Welch. This will be the 5th annual meeting, and some new features are promised by the executive committee.

A. C. G.

Veterinary Department

Conducted by Prof. Robert Jennings, Veterinary Surgeon, Professional advice through the columns of the Michigan Farmer to all regular subscribers free. The full name and address will be necessary to enable us to identify the subscribers. The symptoms should be accurately described to insure correct treatment. No questions answered professionally by mail unless accompanied by a fee of one dollar. Private address, No. 301 First St., Detroit, Mich.

Emaciation in a Young Bull.

CARSON CITY, Feb. 21st, 1887.
Veterinary Editor of the Michigan Farmer.

I have a thoroughbred bull coming four years old, that has been kept up since a calf, and always been fat and healthy until last October, when he began to lose his appetite, and since then has been losing flesh all the while. Last summer he had sowed corn, hay, and ground feed. This winter I have tried him on different kinds of feed and roots, but to no effect. His hair looks well and nose moist. Drinks very little water. While feeding him he seems anxious for feed but will eat only a few mouthfuls. What can be done for him? Please answer through the MICHIGAN FARMER.

L. N. M.

Answer.—From the description given in the above letter it is simply impossible for us to diagnose the trouble with your bull. We would advise a careful examination of the animal's mouth, in which the cause may be discovered. Foreign substances, as corn-cobs, sticks, etc., sometimes become wedged between the molar teeth, in the upper jaw. We have met several such cases, one of a mule, which for months was wasting away in flesh, could not eat hay or any solid food; sleep was not that kept alive for several months, when the owner discovered a molar in the back part of the mouth and summoned us to remove it. The molar proved to be a piece of corn-cob wedged so tightly between the upper molars as to require considerable force to remove it. The mule soon regained its former condition, and power to masticate its food. Caries, or decay of the teeth, is another cause for such symptoms; or some irregularity in the process of dentition will cause similar symptoms. If you fail to discover the cause, we would advise you to call a competent veterinary surgeon; with the animal before him he can advise you understandingly.

Indigestion in Aged Animal, No. 2.

PONTIAC, Mich., Feb. 24, 1887.
Veterinary Editor of the Michigan Farmer.

I have followed the directions for indigestion in aged animal in FARMER of Jan. 24, 1887. The horse's bowels seem to be all right, and he does not rub his tail much, if any more, but his hide is as tight as before; eats and drinks heartily. I report for further instructions as directed.

SUBSCRIBER.

Answer.—The improvement in the animal so far is satisfactory. We now advise giving the following: Barbadoes aloes, pulv., four ounces; sulphur flos, eight ounces; Jamaica ginger root, pulv., four ounces; lin-

sped meal, six ounces. Mix well together. Give one tablespoonful night and morning in the feed.

Cutaneous or Follicular Disease in a Colt.

PONTIAC, Mich., Feb. 28, 1887.
Veterinary Editor of the Michigan Farmer.

I have a bay gelding one year old past that has been covered with gummy scabs for six or seven months, which makes him very rough. I have noticed nothing of his rubbing until recently; he has rubbed off the hair on a portion of his hind quarters, which leaves the skin very scurfy. I enclose a few specimens as they appear on the colt. Please tell me what ails the colt and what to do for him. SUBSCRIBER'S SON.

Answer.—From your description of the symptoms in your colt, together with the specimens of hair enclosed in your letter of inquiry, we are inclined to believe the trouble with your colt to be some morbid condition of the skin, involving the roots of the hair and their follicles, hair sacs or folds, due to constitutional derangement. Treatment: Take sulphate wine, one dram; glycerine, two ounces; pure water, eight ounces; mix all together and shake well. Wash the parts clean with warm water and castile soap, then apply the wash to the diseased surface. Give internally the following: Sootine aloes, pulv., two ounces; Jamaica ginger root, pulv., one ounce; nitrate potassa, pulv., one ounce. Mix all together and divide into twelve powders. Give one night and morning. Discontinue for a week, and renew the powders as before.

Probably Malignant Vaginal Catarrh.

HOLLY, Feb. 23, 1887.
Veterinary Editor of the Michigan Farmer.

I have a 16-year old mare troubled with what is believed to be the whites. The discharges, though less at first, are now from one to two quarts, several times a day, of a slightly yellowish white, and somewhat fetid smell. Has worked occasionally, but not much since Oct. 1. About that time she perhaps a little later, she was put to horse. Is there any remedy for the complaint in this stage?

P. J.

Answer.—The above as described is a case of rare occurrence, and not easily diagnosed without personal examination of the animal. It is not an ordinary case of Leucorrhoea, or whites, but probably due to local irritation of a malignant character either of the vagina, or the uterus. To diagnose the case satisfactorily will require personal examination of the vagina and the uterus, to determine the true character of the disease and apply the proper remedy. In the absence of a veterinary surgeon in your neighborhood, we would advise the following: Wash out the parts clean with tepid water, then inject the following: Chloride zinc, half a dram; dissolve in one pint of rainwater; add four ounces of glycerine, shake well and use with a syringe once or twice a day. If the general health of the animal is not good, and you have not the advantage of a surgeon, please inform us, giving symptoms; we will then prescribe remedy.

Irritation of the Bladder in a Mare.

HANOVER, Feb. 28, 1887.
Veterinary Editor of the Michigan Farmer.

I wish your opinion in the following case: I have a mare 12 years of age that is trying to urinate very frequently, say 20 times each day, a very little each time, very thick and yellow. I think she slipped and strained herself. She is in fair condition, good appetite and in good spirits. I think she was hurt drawing a load of manure a short time ago. What shall I do for her? I have given her a small amount of coppers and also some spirits niter.

SUBSCRIBER.

Answer.—Your description of the symptoms in your mare are not sufficiently clear to enable us to diagnose the trouble satisfactorily. The symptoms, as given, indicate some morbid condition of the kidneys or bladder, causing irritation of one or both. The frequent micturition indicates local irritation of the bladder. Treatment: Give one to two drachms of hydro-chloric acid, in a pint of water, twice a day. At first the animal may refuse to drink. Give it other water, and the mare will soon drink it with a relish. If the diagnosis is not right, the acid being a good tonic will do no harm. Give good wholesome food, avoiding corn or cornmeal.

Commercial.

DETROIT WHOLESALE MARKET.

DETROIT, March 12, 1887.

FLOUR.—Market lower for Minnesota brands and closes quiet and easy. Quotations are as follows:

Michigan, roller process..... \$5.00 @ \$5.75
Michigan, roller process..... \$5.00 @ \$5.75
Minnesota, rollers..... \$5.00 @ \$5.75
Minnesota, rollers..... \$5.00 @ \$5.75
Minnesota, rollers..... \$5.00 @ \$5.75
Minnesota, rollers..... \$5.00 @ \$5.75

WHEAT.—The week closes with the wheat market quiet and values lower both spot and futures. Business during the week has been active and it appears as if prices would have been sustained if the operators who are running the Chicago market had not manipulated it for a decline. It may be to their interest to push up prices next week, so it is a decidedly difficult matter to say how wheat will act the coming week. Closing prices on Saturday were as follows: Spot—No. 1 white, \$2.00; No. 2 red, \$1.95; No. 3 red, \$1.90; No. 4 red, \$1.85; No. 5 red, \$1.80; No. 6 red, \$1.75; No. 7 red, \$1.70; No. 8 red, \$1.65; No. 9 red, \$1.60; No. 10 red, \$1.55; No. 11 red, \$1.50; No. 12 red, \$1.45; No. 13 red, \$1.40; No. 14 red, \$1.35; No. 15 red, \$1.30; No. 16 red, \$1.25; No. 17 red, \$1.20; No. 18 red, \$1.15; No. 19 red, \$1.10; No. 20 red, \$1.05; No. 21 red, \$1.00; No. 22 red, \$0.95; No. 23 red, \$0.90; No. 24 red, \$0.85; No. 25 red, \$0.80; No. 26 red, \$0.75; No. 27 red, \$0.70; No. 28 red, \$0.65; No. 29 red, \$0.60; No. 30 red, \$0.55; No. 31 red, \$0.50; No. 32 red, \$0.45; No. 33 red, \$0.40; No. 34 red, \$0.35; No. 35 red, \$0.30; No. 36 red, \$0.25; No. 37 red, \$0.20; No. 38 red, \$0.15; No. 39 red, \$0.10; No. 40 red, \$0.05; No. 41 red, \$0.00; No. 42 red, \$0.00; No. 43 red, \$0.00; No. 44 red, \$0.00; No. 45 red, \$0.00; No. 46 red, \$0.00; No. 47 red, \$0.00; No. 48 red, \$0.00; No. 49 red, \$0.00; No. 50 red, \$0.00; No. 51 red, \$0.00; No. 52 red, \$0.00; No. 53 red, \$0.00; No. 54 red, \$0.00; No. 55 red, \$0.00; No. 56 red, \$0.00; No. 57 red, \$0.00; No. 58 red, \$0.00; No. 59 red, \$0.00; No. 60 red, \$0.00; No. 61 red, \$0.00; No. 62 red, \$0.00; No. 63 red, \$0.00; No. 64 red, \$0.00; No. 65 red, \$0.00; No. 66 red, \$0.00; No. 67 red, \$0.00; No. 68 red, \$0.00; No. 69 red, \$0.00; No. 70 red, \$0.00; No. 71 red, \$0.00; No. 72 red, \$0.00; No. 73 red, \$0.00; No. 74 red, \$0.00; No. 75 red, \$0.00; No. 76 red, \$0.00; No. 77 red, \$0.00; No. 78 red, \$0.00; No. 79 red, \$0.00; No. 80 red, \$0.00; No. 81 red, \$0.00; No. 82 red, \$0.00; No. 83 red, \$0.00; No. 84 red, \$0.00; No. 85 red, \$0.00; No. 86 red, \$0.00; No. 87 red, \$0.00; No. 88 red, \$0.00; No. 89 red, \$0.00; No. 90 red, \$0.00; No. 91 red, \$0.00; No. 92 red, \$0.00; No. 93 red, \$0.00; No. 94 red, \$0.00; No. 95 red, \$0.00; No. 96 red, \$0.00; No. 97 red, \$0.00; No. 98 red, \$0.00; No. 99 red, \$0.00; No. 100 red, \$0.00; No. 101 red, \$0.00; No. 102 red, \$0.00; No. 103 red, \$0.00; No. 104 red, \$0.00; No. 105 red, \$0.00; No. 106 red, \$0.00; No. 107 red, \$0.00; No. 108 red, \$0.00; No. 109 red, \$0.00; No. 110 red, \$0.00; No. 111 red, \$0.00; No. 112 red, \$0.00; No. 113 red, \$0.00; No. 114 red, \$0.00; No. 115 red, \$0.00; No. 116 red, \$0.00; No. 117 red, \$0.00; No. 118 red, \$0.00; No. 119 red, \$0.00; No. 120 red, \$0.00; No. 121 red, \$0.00; No. 122 red, \$0.00; No. 123 red, \$0.00; No. 124 red, \$0.00; No. 125 red, \$0.00; No. 126 red, \$0.00; No. 127 red, \$0.00; No. 128 red, \$0.00; No. 129 red, \$0.00; No. 130 red, \$0.00; No. 131 red, \$0.00; No. 132 red, \$0.00; No. 133 red, \$0.00; No. 134 red, \$0.00; No. 135 red, \$0.00; No. 136 red, \$0.00; No. 137 red, \$0.00; No. 138 red, \$0.00; No. 139 red, \$0.00; No. 140 red, \$0.00; No. 141 red, \$0.00; No. 142 red, \$0.00; No. 143 red, \$0.00; No. 144 red, \$0.00; No. 145 red, \$0.00; No. 146 red, \$0.00; No. 147 red, \$0.00; No. 148 red, \$0.00; No. 149 red, \$0.00; No. 150 red, \$0.00; No. 151 red, \$0.00; No. 152 red, \$0.00; No. 153 red, \$0.00; No. 154 red, \$0.00; No. 155 red, \$0.00; No. 156 red, \$0.00; No. 157 red, \$0.00; No. 158 red, \$0.00; No. 159 red, \$0.00; No. 160 red, \$0.00; No. 161 red, \$0.00; No. 162 red, \$0.00; No. 163 red, \$0.00; No. 164 red, \$0.00; No. 165 red, \$0.00; No. 166 red, \$0.00; No. 167 red, \$0.00; No. 168 red, \$0.00; No. 169 red, \$0.00; No. 170 red, \$0.00; No. 171 red, \$0.00; No. 172 red, \$0.00; No. 173 red, \$0.00; No. 174 red, \$0.00; No. 175 red, \$0.00; No. 176 red, \$0.00; No. 177 red, \$0.00; No. 178 red, \$0.00; No. 179 red, \$0.00; No. 180 red, \$0.00; No. 181 red, \$0.00; No. 182 red, \$0.00; No. 183 red, \$0.00; No. 184 red, \$0.00; No. 185 red, \$0.00; No. 186 red, \$0.00; No. 187 red, \$0.00; No. 188 red, \$0.00; No. 189 red, \$0.00; No. 190 red, \$0.00; No. 191 red, \$0.00; No. 192 red, \$0.00; No. 193 red, \$0.00; No. 194 red, \$0.00; No. 195 red, \$0.00; No. 196 red, \$0.00; No. 197 red, \$0.00; No. 198 red, \$0.00; No. 199 red, \$0.00; No. 200 red, \$0.00; No. 201 red, \$0.00; No. 202 red, \$0.00; No. 203 red, \$0.00; No. 204 red, \$0.00; No. 205 red, \$0.00; No. 206 red, \$0.00; No. 207 red, \$0.00; No. 208 red, \$0.00; No. 209 red, \$0.00; No. 210 red, \$0.00; No. 211 red, \$0.00; No. 212 red, \$0.00; No. 213 red, \$0.00; No. 214 red, \$0.00; No. 215 red, \$0.00; No. 216 red, \$0.00; No. 217 red, \$0.00; No. 218 red, \$0.00; No. 219 red, \$0.00; No. 220 red, \$0.00; No. 221 red, \$0.00; No. 222 red, \$0.00; No. 223 red, \$0.00; No. 224 red, \$0.00; No. 225 red, \$0.00; No. 226 red, \$0.00; No. 227 red, \$0.00; No. 228 red, \$0.00; No. 229 red, \$0.00; No. 230 red, \$0.00; No. 231 red, \$0.00; No. 232 red, \$0.00; No. 233 red, \$0.00; No. 234 red, \$0.00; No. 235 red, \$0.00; No. 236 red, \$0.00; No. 237 red, \$0.00; No. 238 red, \$0.00; No. 239 red, \$0.00; No. 240 red, \$0.00; No. 241 red, \$0.00; No. 242 red, \$0.00; No. 243 red, \$0.00; No. 244 red, \$0.00; No. 245 red, \$0.00; No. 246 red, \$0.00; No. 247 red, \$0.00; No. 248 red, \$0.00; No. 249 red, \$0.00; No. 250 red, \$0.00; No. 251 red, \$0.00; No. 252 red, \$0.00; No. 253 red, \$0.00; No. 254 red, \$0.00; No. 255 red, \$0.00; No. 256 red, \$0.00; No. 257 red, \$0.00; No. 258 red, \$0.00; No. 259 red, \$0.00; No. 260 red, \$0.00; No. 261 red, \$0.00; No. 262 red, \$0.00; No. 263 red, \$0.00; No. 264 red, \$0.00; No. 265 red, \$0.00; No. 266 red, \$0.00; No. 267 red, \$0.00; No. 268 red, \$0.00; No. 269 red, \$0.00; No. 270 red, \$0.00; No. 271 red, \$0.00; No. 272 red, \$0.00; No. 273 red, \$0.00; No. 274 red, \$0.00; No. 275 red, \$0.00; No. 276 red, \$0.00; No. 277 red, \$0.00; No. 278 red, \$0.00; No. 279 red, \$0.00; No. 280 red, \$0.00; No. 281 red, \$0.00; No. 282 red, \$0.00; No. 283 red, \$0.00; No. 284 red, \$0.00; No. 285 red, \$0.00; No. 286 red, \$0.00; No. 287 red, \$0.00; No. 288 red, \$0.00; No. 289 red, \$0.00; No. 290 red, \$0.00; No. 291 red, \$0.00; No. 292 red, \$0.00; No. 293 red, \$0.00; No. 294 red, \$0.00; No. 295 red, \$0.00; No. 296 red, \$0.00; No. 297 red, \$0.00; No. 298 red, \$0.00; No. 299 red, \$0.00; No. 300 red, \$0.00; No. 301 red, \$0.00; No. 302 red, \$0.00; No. 303 red, \$0.00; No. 304 red, \$0.00; No. 305 red, \$0.00; No. 306 red, \$0.00; No. 307 red, \$0.00; No. 308 red, \$0.00; No. 309 red, \$0.00; No. 310 red, \$0.00; No. 311 red, \$0.00; No. 312 red, \$0.00; No. 313 red, \$0.00; No. 314 red, \$0.00; No. 315 red, \$0.00; No. 316 red, \$0.00; No. 317 red, \$0.00; No. 318 red, \$0.00; No. 319 red, \$0.00; No. 320 red, \$0.00; No. 321 red, \$0.00; No. 322 red, \$0.00; No. 323 red, \$0.00; No. 324 red, \$0.00; No. 325 red, \$0.00; No. 326 red, \$0.00; No. 327 red, \$0.00; No. 328 red, \$0.00; No. 329 red, \$0.00; No. 330 red, \$0.00; No. 331 red, \$0.00; No. 332 red, \$0.00; No. 333 red, \$0.00; No. 334 red, \$0.00; No. 335 red, \$0.00; No. 336 red, \$0.00; No. 337 red, \$0.00; No. 338 red, \$0.00; No. 339 red, \$0.00; No. 340 red, \$0.00; No. 341 red, \$0.00; No. 342 red, \$0.00; No. 343 red, \$0.00; No. 344 red, \$0.00; No. 345 red, \$0.00; No. 346 red, \$0.00; No. 347 red, \$0.00; No. 348 red, \$0.00; No. 349 red, \$0.00; No. 350 red, \$0.00; No. 351 red, \$0.00; No. 352 red, \$0.00; No. 353 red, \$0.00; No. 354 red, \$0.00; No. 355 red, \$0.00; No. 356 red, \$0.00; No. 357 red, \$0.00; No. 358 red, \$0.00; No. 359 red, \$0.00; No. 360 red, \$0.00; No. 361 red, \$0.00; No. 362 red, \$0.00; No. 363 red, \$0.00; No. 364 red, \$0.00; No. 365 red, \$0.00; No. 366 red, \$0.00; No. 367 red, \$0.00; No. 368 red, \$0.00; No. 369 red, \$0.00; No. 370 red, \$0.00; No. 371 red, \$0.00; No. 372 red, \$0.00; No. 373 red, \$0.00; No. 374 red, \$0.00; No. 375 red, \$0.00; No. 376 red, \$0.00; No. 377 red, \$0.00; No. 378 red, \$0.00; No. 379 red, \$0.00; No. 380 red, \$0.00; No. 381 red, \$0.00; No. 382 red, \$0.00; No. 383 red, \$0.00; No. 384 red, \$0.00; No. 385 red, \$0.00; No. 386 red, \$0.00; No. 387 red, \$0.00; No. 388 red, \$0.00; No. 389 red, \$0.00; No. 390 red, \$0.00; No. 391 red, \$0.00; No. 392 red, \$0.00; No. 393 red, \$0.00; No. 394 red, \$0.00; No. 395 red, \$0.00; No. 396 red, \$0.00; No. 397 red, \$0.00; No. 398 red, \$0.00; No. 399 red, \$0.00; No. 400 red, \$0.00; No. 401 red, \$0.00; No. 402 red, \$0.00; No. 403 red, \$0.00; No. 404 red, \$0.00; No. 405 red, \$0.00; No. 406 red, \$0.00; No. 407 red, \$0.00; No. 408 red, \$0.00; No. 409 red, \$0.00; No. 410 red, \$0.00; No. 411 red, \$0.00; No. 412 red, \$0.00; No. 413 red, \$0.00; No. 414 red, \$0.00; No. 415 red, \$0.00; No. 416 red, \$0.00; No. 417 red, \$0.00; No. 418 red, \$0.00; No. 419 red, \$0.00; No. 420 red, \$0.00; No. 421 red, \$0.00; No. 422 red, \$0.00; No. 423 red, \$0.00; No. 424 red, \$0.00; No. 425 red, \$0.00; No. 426 red, \$0.00; No. 427 red, \$0.00; No. 428 red, \$0.00; No. 429 red, \$0.00; No. 430 red, \$0.00; No. 431 red, \$0.00; No. 432 red, \$0.00; No. 433 red, \$0.00; No. 434 red, \$0.00; No. 435 red, \$0.00; No. 436 red, \$0.00; No. 437 red, \$0.00; No. 438 red, \$0.00; No. 439 red, \$0.00; No. 440 red, \$0.00; No. 441 red, \$0.00; No. 442 red, \$0.00; No. 443 red, \$0.00; No. 444 red, \$0.00; No. 445 red, \$0.00; No. 446 red, \$0.00; No. 447 red, \$0.00; No. 448 red, \$0.00; No. 449 red, \$0.00; No. 450 red, \$0.00; No. 451 red, \$0.00; No. 452 red, \$0.00; No. 453 red, \$0.00; No. 454 red, \$0.00; No. 455 red, \$0.00; No. 456 red, \$0.00; No. 457 red, \$0.00; No. 458 red, \$0.00; No. 459 red, \$0.00; No. 460 red, \$0.00; No. 461 red, \$0.00; No. 462 red, \$0.00; No. 463 red, \$0.00; No. 464 red, \$0.00; No. 465 red, \$0.00; No. 466 red, \$0.00; No. 467 red, \$0.00; No. 468 red, \$0.00; No. 469 red, \$0.00; No. 470 red, \$0.00; No. 471 red, \$0.00; No. 472 red, \$0.00; No. 473 red, \$0.00; No. 474 red, \$0.00; No. 475 red, \$0.00; No. 476 red, \$0.00; No. 477 red, \$0.00; No. 478 red, \$0.00; No. 479 red, \$0.00; No. 480 red, \$0.00; No. 481 red, \$0.00; No. 482 red, \$0.00; No. 483 red, \$0.00; No. 484 red, \$0.00; No. 485 red, \$0.00; No. 486 red, \$0.00; No. 487 red, \$0.00; No. 488 red, \$0.00; No. 489 red, \$0.00; No. 490 red, \$0.00; No. 491 red, \$0.00; No. 492 red, \$0.00; No. 493 red, \$0.00; No. 494 red, \$0.00; No. 495 red, \$0.00; No. 496 red, \$0.00; No. 497 red, \$0.00; No. 498 red, \$0.00; No. 499 red, \$0.00; No. 500 red, \$0.00; No. 501 red, \$0.00; No. 502 red, \$0.00; No. 503 red, \$0.00; No. 504 red, \$0.00; No. 505 red, \$0.00; No. 506 red, \$0.00; No. 507 red, \$0.00; No. 508 red, \$0.00; No. 509 red, \$0.00; No. 510 red, \$0.00; No. 511 red, \$0.00; No. 512 red, \$0.00; No. 513 red, \$0.00; No. 514 red, \$0.00; No. 515 red, \$0.00; No. 516 red, \$0.00; No. 517 red, \$0.00; No. 518 red, \$0.00; No. 519 red, \$0.00; No. 520 red, \$0.00; No. 521 red, \$0.00; No. 522 red, \$0.00; No. 523 red, \$0.00; No. 524 red, \$0.00; No. 525 red, \$0.00; No. 526 red, \$0.00; No. 527 red, \$0.00; No. 528 red, \$0.00; No. 529 red, \$0.00; No. 530 red, \$0.00; No. 531 red, \$0.00; No. 532 red, \$0.00; No. 533 red, \$0.00; No. 534 red, \$0.00; No. 535 red, \$0.00; No. 536 red, \$0.00; No. 537 red, \$0.00; No. 538 red, \$0.00; No. 539 red, \$0.00; No. 540 red, \$0.00; No. 541 red, \$0.00; No. 542 red, \$0.00; No. 543 red, \$0.00; No. 544 red, \$0.00; No. 545 red, \$0.00; No. 546 red, \$0.00; No. 547 red, \$0.00; No. 548 red, \$0.00; No. 549 red, \$0.00; No. 550 red, \$0.00; No. 551 red, \$0.00; No. 552 red, \$0.00; No. 553 red, \$0.00; No. 554 red, \$0.00; No. 555 red, \$0.00; No. 556 red, \$0.00; No. 557 red, \$0.00; No. 558 red, \$0.00; No. 559 red, \$0.00; No. 560 red, \$0.00; No. 561 red, \$0.00; No. 562 red, \$0.00; No. 563 red, \$0.00; No. 564 red, \$0.00; No. 565 red, \$0.00; No. 566 red, \$0.00; No. 567 red, \$0.00; No. 568 red, \$0.00; No. 569 red, \$0.00; No. 570 red, \$0.00; No. 571 red, \$0.00; No. 572 red, \$0.00; No. 573 red, \$0.00; No. 574 red, \$0.00; No. 575 red, \$0.00; No. 576 red, \$0.00; No. 577 red, \$0.00; No. 578 red, \$0.00; No. 579 red, \$0.00; No. 580 red, \$0.00; No. 581 red, \$0.00; No. 582 red, \$0.00; No. 583 red, \$0.00; No. 584 red, \$0.00; No. 585 red, \$0.00; No. 586 red, \$0.00; No. 587 red, \$0.00; No. 588 red, \$0.00; No. 589 red, \$0.00; No. 590 red, \$0.00; No. 591 red, \$0.00; No. 592 red, \$0.00; No. 593 red, \$0.00; No. 594 red, \$